

SUPPLEMENT TO The Calcutta Gazette

WEDNESDAY, AUGUST 3, 1864.

OFFICIAL PAPERS.

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Reply to the Report of the Commission of Enquiry on the Epidemic Fever which was published in the Supplement to the "Calcutta Gazette" of the 20th April 1864.

From the HON'BLE A. EDEN, Secretary to the Government of Bengal, to F. ANDERSON, Esq., M. D., President of the Commission of Enquiry on the Epidemic Fever,—(No. 1479T., dated Darjeeling, the 12th July 1864.)

I AM directed to acknowledge the receipt of your letter dated the 31st March last, submitting the Report of the Commission appointed to enquire into the causes of the Epidemic Fever raging in the Districts of Hooghly, Burdwan, Nuddea, Jessore, and the 24-Pergunnahs.

2. Before acting fully on this Report the Lieutenant-Governor deemed it advisable to publish it with a view to invite discussion, and to elicit an expression of opinion on the part of the public as to the facts and opinions recorded by the Commission, and the measures recommended by them for adoption. Beyond a few articles in some of the English and Native Newspapers commending, in general terms, the labors of the Commission, and urging the Government to act upon their advice, His Honor has received no suggestions on the subject.

3. In the meantime the Report has been submitted to the Chief Engineer for his remarks, and on that Officer's Report it has been determined on the Public Works Department to appoint a Special Engineer Officer for the purpose of taking the levels of the country affected by the Epidemic, of ascertaining how far the drainage has been intercepted by Railways, Roads, and other obstructions, and what measures can be taken to remove these obstructions or rectify their effects, and of submitting a general scheme for improving it wherever it is defective.

4. This Officer will also be desired to point out any works of obvious advantage which may

be immediately undertaken with benefit to the public health, such as the digging of tanks, the excavation of khals or otherwise; and the Commissioners of Nuddea and Burdwan will be authorized to undertake any such work, provided one-half the expense is contributed by the Zemindars and villagers, the other moiety being given by the Government from Local Funds.

5. It now remains to consider the other recommendations of the Commission.

6. In paragraphs 10 to 17 the Commission describe the common condition of the villages which they visited. The surface of the land within the villages is covered with low jungle. The villages are laid out on no plan and without any reference to conservancy arrangements. The houses or huts are built of earth taken from a hole close by, which becomes a receptacle for all kinds of filth. All ventilation is kept out by the hedge of jungle with which every hut or collection of huts is surrounded. Filth is deposited indiscriminately in the nearest available spot. There are no public or private necessities, and the people resort to the jungles and open fields in the neighbourhood of their houses. The houses are unventilated and over-crowded; the poorer classes sleep on mats on the raised mud floor, sometimes not more than a foot from the ground; and from the brick houses in which the better classes reside the filth is allowed to trickle through some opening on the floor and brick work and to lie beneath the walls. The tanks near the villages are used indiscriminately for bathing, washing, cooking, and drinking purposes, and being also used as receptacles for all kinds of refuse and filth, the water they contain is unfit for domestic purposes.

7. The Commission, after describing the nature, symptoms, progress, and history of the disease, proceed to analyse the predisposing causes at work to produce and spread it. There seems to be no doubt that the primary cause of the disease is

miasma; that it prevails more or less in an endemic form in most parts of Bengal; and that when it assumes an epidemic form its effects are aggravated by the want of light, pure air, clean water, and sufficient ventilation, and by the decomposition of animal and vegetable matter in the close vicinity of dwellings. The miasma which naturally arises from all low marshy lands while drying under the influence of great heat is increased by defective drainage; and in the affected Districts the various causes of disease which have always existed are said to have been gradually culminating within the last few years until the turning point has been reached; and villages, after one or two years' warning entirely neglected, have at last been swept and almost depopulated by the pestilence.

8. The Commission report that the Native Doctors employed in the Districts affected by the Epidemic are generally of little use unless strictly supervised, and that only two, whose names are deserving of special mention, Brojolall Doss and Sheik Julaluddeen, have really done good service. The Sub-Assistant Surgeons, they report, on the authority of Dr. Elliot, were a complete failure, two having left their posts after a very short residence. A copy of paragraph 43 of the Report relating to this point will be sent to the Principal Inspector-General for enquiry into the conduct of these men, and into the charge made against them that the medicines supplied by Government were improperly distributed.

9. The Commission are of opinion that the measures taken for checking the progress of the disease were good and sound in themselves, but that they were insufficient, and not always carried out with judgment. The work, they observe, requires a minute supervision such as the Magistrates have no time to exercise, and an Agency and Funds which are not at their command.

10. In paragraph 46 the Commission recommend that, in the event of the Epidemic spreading to other places, a staff of good Native Doctors with one Sub-Assistant Surgeon to a circle of five or six villages should be appointed and placed in central places at the very commencement of the outbreak; that they should be fully supplied with the most necessary medicines; and that the whole should be placed under the superintendence of a specially selected Assistant Surgeon who would move from place to place, remaining at each place as long as he might consider necessary.

11. The measures recommended by the Commission in paragraphs 48 and 49, and urged specially by Baboo Digumbar Mitter, will be considered

on receipt of the Report of the Engineer Officer who will be deputed as abovementioned.

12. The suggestions contained in paragraphs 51 to 58, for burning the weeds and jungle near dwelling houses; for setting apart tanks for drinking water, deepening them, and keeping them clear and free from jungle; for filling up holes in villages and regulating future excavations; for keeping the ground clear of decaying vegetable matter and burning all jungle that may be cut down; for regulating the burning and burying of dead bodies, and for inducing the people to adopt some means of ventilation in their houses, will be communicated to the Commissioners of Nuddea and Burdwan for their guidance and that of the Magistrates in the measures to be taken for the future prevention of the Epidemic. The Commissioners will at the same time be directed to persevere in the measures already authorised, and will be required to report at once what has been done in pursuance of the instructions conveyed in orders of 22nd February last, what progress has been made in checking the disease in each District, and whether it now prevails any where to such an extent as to demand the employment of a Special Medical Agency, as proposed by the Commission in paragraph 46, or of a Special Officer to carry out sanitary improvements as suggested in paragraph 44.

13. The Commissioners will also be desired to report whether it would be desirable to give effect to the provisions of the District Municipal Improvement Act in any town or village, or in any union of towns and villages, and in their neighbourhood, with a view to raise funds for the purpose of sanitary improvement and to give the inhabitants of such places a direct voice and interest in carrying out such improvements and in introducing some kind of conservancy in place of the utter absence and neglect of cleanliness which have hitherto prevailed.

14. The Commissioners will further be instructed to bring paragraphs 61 to 64 of the Report to the notice of the Magistrates and Assistant Surgeons in the affected Districts and of the other Medical Officers employed there.

15. In conclusion I am desired to convey the Lieutenant-Governor's acknowledgments to the Members of the Commission for their Report, and for the pains they have taken in enquiring into the nature and causes of the Epidemic, and in suggesting measures for preventing the spread of the disease and for alleviating its effects. A copy of this letter will accordingly be forwarded to each Member for his information.

The Annual Report of the Marine Department for the year 1863-64.

From CAPTAIN JOHN G. REDDIE, Master Attendant, to the Secretary to the Government of Bengal,—(No. 1806, dated the 10th June 1864.)

I HAVE the honor to submit the Annual Report of the Marine Department for the year 1863-64. The Statements accompanying it I beg may be returned when no longer required.

Annual Report of the Establishment of the Marine Department under the Government of Bengal for the year 1863-64.

By a Resolution of the Governor General in Council, No. 5920, dated Financial Department, 30th November last, the Office of Controller of Marine Affairs was abolished, and the duties of that Office were transferred to the Master Attendant with a small additional Office Establishment.

Strength of the Pilot Service on the 30th April 1864.

According to the Muster Book.

12 Branch Pilots, of these 3 on leave.	7
30 Masters, " 7 "	7
30 Mates, " 5 "	5
12 Senior 2nd Mates, " 2 "	2
12 Junior " " 2 "	2
39 Volunteers, " 1 "	1

Total 105, of these 20 on leave.

Casualties in the Pilot Service during 1863-64.

1 Master died.	
1 " pensioned.	
1 Mate died.	
1 Senior 2nd Mate dismissed.	
1 Volunteer pensioned.	
1 " dismissed.	
1 " resigned.	

Total 7

Free Pilots of the Service.

4 Branch Pilots.	
2 Acting Branch Pilots.	
19 Masters.	

20 Acting Masters.	
4 Mates.	
17 Acting Mates.	

Total 60

Licensed Pilots.

1 Pensioned Branch Pilot.	
6 Masters.	
84 Mates.	
20 Leadsman.	

Total 111

According to the Active Service.

9 Full	...	19 Branch Pilots.
3 Acting	...	
20 Full, of these one	...	40 Mates.
River Surveyor	...	
20 Acting	...	38 Mates.
5 Full	...	
27 Acting	...	12 Acting Senior 2nd Mates.

2 Acting Junior 2nd Mates.
6 7 Volunteers.

105 On active service.
20 On leave.

Total ... 125

Salaried Pilots of the Service.

4 Branch Pilots in Command of four Pilot Vessels.	
1 Branch Pilot, Running.	
1 Acting Branch Pilot, Running.	
1 Master, River Surveyor.	
1 Mate, Running.	
10 Acting Mates, Running.	
12 Acting Senior 2nd Mates.	
2 Acting Junior 2nd Mates.	
7 Volunteers.	

Total 39

2. *Pilot Service.*—The Pilot Service is almost now a free one and is marginally noted.

3. There are thirty-nine Officers still on the Salaried List, but of these there are only thirteen Officers running as Pilots, the others are four Branch Pilots in command of the Brigs, one River Surveyor, twelve Acting Senior Second Mates, two Acting Junior Second Mates, and seven Volunteers.

4. There are sixty-six Government Pilots on the Free List, and thirty-one Licensed Pilots, with twenty Licensed Leadsman. I have thus on the Free List ninety-seven Running Officers, most of whom are capable of piloting Vessels of any draught or tonnage. These twenty Licensed Leadsman are nearly all practical Seamen, only requiring a knowledge of the channels of the River, which they generally acquire in two years. So there need be no alarm for the future how the supply of Pilots is to be kept up.

5. Everything shows that the present system of Free Pilots is working well. This year I have only had one complaint against a Pilot, and that is in abeyance pending the Ship's return. There has been no detention at the Sandheads, and the number of accidents are below the average, so I have the pleasing task of reporting most favorably on the whole of the Officers of the Pilot Service.

6. *Arrivals and Departures**.—Arrivals and departures are 2,252 Vessels, being an increase over last year of 382, their tonnage amounting to 18,20,593 tons, being 4,13,467 tons in excess of last year. Although in 1855-56 there were a greater number of Vessels, this is the largest amount of tonnage that has ever been in this Port.

7. *Vessels taking Steam.*—The following is an analysis of the number of Vessels that had and had not Steam and the Steam Tugs in this Port:—

Arrivals.

With Steam.	Without.	Steamers.
669	297	174

Departures.

901	35	176
1,570	332	350
Last year 1,335	...	233

Over last year 235 ... 117

8. *Groundings.*—Only one grounding, which resulted in total loss, was tried by a Marine Court, which acquitted the Pilot.

9. Thirteen other groundings took place of such a nature that I considered necessary to be tried by a Committee of Enquiry, and out of these thirteen only two Pilots were punished (being

young hands) by having to go back as Leadsman for some time; one Pilot had his applications stopped for one month. All others were pronounced accidental.

10. With such an increase of Shipping this is very creditable to the Officers of the Pilot Service.

11. *Steam Tugs.*—The generality of the Steam Tugs in the River are quite unequal to tow the class of Ships now resorting to this Port. The Mercantile community were quite aware of this, and consequently we have more new Steam Tugs with more coming.

12. *Collisions in Pilot's Water.*—There have been twelve collisions in Pilot's Water, but none of them serious. One was owing to the stupidity of an outsider in charge of a Pilot Vessel, who was dismissed. One Pilot had through carelessness caused a collision, and had to pay all damage; the other through want of judgment, so he was confined to Vessels of the smallest grade for six months. All the others were pronounced accidental, so that out of the twelve collisions only two of the Pilots were culpable.

13. *Collisions in Port.*—Within the limits of the Port under charge of Assistant Harbour Masters there have been five accidents. Three of the Officers have been reprimanded, and the other two acquitted of all blame;—very creditable to all in the Harbour Master's Department.

14. *Marine Court.*—Captain Howe has been appointed Judge of the Marine Court instead of a lawyer. There has been only one case brought before it this year, and the Pilot was acquitted. Not one case of complaint has come before me of any kind, which is very creditable, and shows that the Officers are well aware how much their getting employment depends on the character they

bear for sobriety, civility, and attention to their duties.

15. *Channels of the Hooghly.**—Mr. Obbard's (River Surveyor) Report is on the whole a more favorable one than it was last year, and he shows very clearly the beneficial results of employing some artificial means for clearing a passage at the times when the periodical changes take place, and when a powerful Steamer with rakes and rollers does come I feel all anxiety about the channels of the river will be ended.

16. I will briefly sum up Mr. Obbard's Report by stating that from Calcutta to Nynan there has been little or no change. Nynan itself has given little trouble; Anchoring Creek Ridge very good; there have been the usual changes in the different Guts of the James and Marys. These changes have been less extensive, and the Eastern Gut at this time is in very good order.

17. The Rangafulla has as usual been shifting, but it is in a better state than it was last year. Below this to Saugor there is a vast improvement, which is entirely owing to the successful use of the rakes. From Saugor to Sea there is a better channel than was ever known.

18. *Celerity.†*—Steamer *Celerity* certainly does good service in enabling us to keep the Station supplied, and relieving and taking stores to the Floating Light Vessels and Light Houses. Her hull is in good order, but her boilers require a thorough overhaul.

19. *Pilot, Light, and Surveying Vessels.*—Pilot Brigs *Kedgerie, Foam, Mutlah, and Chinsurah* are in good order, only requiring periodical painting and cleansing.

20. *Fume* is in dock getting repairs to be able to take her Station if she should be required.

21. *Guide*, old wooden Vessel, has been employed as a Pilot Vessel, but has now to be docked and repaired and kept as a reserve.

22. *Megna*, School Ship, is no longer required as such; she has been converted into an Assistant Surveying and Buoy Vessel, which was much required.

23. *Salween*, River Surveying Vessel, is in good order and will last for long. She is constantly employed in the river.

24. *Grappler*, Buoy Vessel, has been thoroughly repaired, and it is to be hoped she will run for a long time without requiring any fresh repairs.

25. *Deva* is in good order. She has been doing duty as a Floating Light Vessel. She was intended for the Mutlah, but there are so few Ships arriving there I will do that duty with the *Charlotte* till more Ships arrive. She will be kept in readiness for either a Pilot or a Floating Light Vessel.

26. *Krishna* has been thoroughly overhauled and repaired. She is now doing duty as a Light Vessel at the Mutlah.

27. *Saugor*, old Pilot Vessel, has been converted into a Floating Light Vessel and thoroughly repaired and is doing the duty on the Ridge.

28. *Comet* and *Star* thoroughly cleaned and repaired, and are in good order.

29. *Hope* is very shaky; she has been patched and light coppered to enable her to keep the Station till the new Vessel comes from home.

30. *Light Houses.*—The Light Houses at Saugor and Cowcolly have been visited by Captain Howe and reported favorably on, especially the former. He also visited False Point Light House, and reports most favorably on all connected with it.

31. A Special Committee met and examined all the Light Houses and Vessels; they reported so favorably of the former that nothing requires to be done to improve them, but new Lanthorns for the Light Vessels have been ordered from England.

32. *Houses of Refuge.*—The houses of refuge have been examined; whatever stores were found wanting have been re-placed.

33. *Harbour Master's Department.**—The Harbour Master's Department continues to deserve great credit for the careful manner the duties are conducted. So few accidents happening in moving so many long heavy Ships in a river like this is very satisfactory.

34. Owing to the stimulus given by increasing the pay of the Assistant Harbour Masters, and dividing them into three Grades, (promotion in these Grades being entirely dependent on the report I get of them,) I have been able to carry on the increased work with only twenty-five Assistant Harbour Masters, so I have not availed myself of the power given me to increase them to thirty.

35. The transactions in this Department have increased considerably this year, there being 2,847 Vessels hauled in and out of Moorings, being an excess of 381 Vessels over last year; hauled in and out of Dock 357, being thirty-seven over last year; and the number of Vessels transported being 2,375, or 356 over last year. The excess of operations being 672 over last year, a very considerable increase.

36. *Moorings.*—The number of fixed and swinging Moorings is 186, one less than last year, two being removed to give more room to the Railway Steamers, and a new one laid down. They are all in excellent condition, as not one has broken adrift this year.

37. *Hawser, Heave-up, and Anchor Boats.*—The number of our Hawser, Heave-up, and Anchor Boats are the same as last year, and if kept at their legitimate duties are quite sufficient; but being called away (as they are) often on service to ship Mails or Treasure, I would again suggest that the Bank of Bengal have their own boats, or allow me to charge regularly, so as I could keep an extra one.

38. It will be seen in Statement No. 2 that 360 Hawser Boats, or one a day on average, is employed landing Mails, and 212 landing and shipping Treasure.

39. Any other Department of Government doing any work for this Department charges for it, and I will send in a Bill regularly for our boats which are employed in any other but the Harbour Master's Department.

40. The Statements show the general working of the whole Department with all the Buoys and Moorings.

41. *Disposition and employment of Boats.*—*

* Statement E.

The Treasure Boat is used entirely for shipping Treasure and Mails, and there is quite enough of work for another.

42. The *Swiftsure* has been thoroughly repaired, is in good order, and is a most useful boat, being constantly employed in general service.

43. The Row Boats have been fully employed at the different Stations in the river.

44. There are three Fire-Engine Boats, one at Cooley Bazar and two at Bankshall Ghaut. They are always kept ready for service, and from their having been called into requisition several times this year for Ships catching fire, their utter worthlessness has been so plain that Government ordered a Committee to report, who has recommended a fire Brigade to be established with a Steamer and powerful Engine with fires always banked up; she will always be ready in case of fire.

45. The Bholeahs are not sufficient for this Department during the time transports are taken up. His Excellency having placed the State Boats under this Department, I have made over for general use the one appointed to the Master Attendant, and make use of one of the State Boats when I required one.

46. *Moyapore.*—Moyapore is reported in good order. I suggested to the Commissary General of Ordnance to send an Officer of that Department to inspect it, which he has done.

47. *Diamond Harbour.*—The Row Boat at Diamond Harbour, besides assisting Ships, attends and supplies the Hospital Ship *Bentinck* with water.

48. *Wreck and Anchor Concern.†—The Vulcan,*

† Statement F.

Purchase, and Lever,

attached to the Wreck and Anchor Concern, are all in good order.

49. The *Vulcan* has been employed chiefly in overhauling and re-placing the Buoys and Moorings in the Mutlah; her expenses for the time she has been so employed will be debited to the Mutlah Port Fund.

50. The *Purchase* was docked and copper-patched, and is in good order; she has been chiefly employed on her legitimate duties in the River Hooghly.

51. The *Lever* was also docked and copper-patched; she is in good order, and has been constantly employed in the river. The earnings of the Department and the employment of these boats in detail are shown in the Statements.

52. *Shipping Office.‡—Mr. Caw, who has been*

‡ Statement G.

Officiating as Shipping Master, for-

wards a full statement of the working of the Shipping Office, which appears to be in a flourishing state, and is well conducted.

53. *Calcutta Port Fund.*—The Port Fund is now put on a proper footing; an Auditor has been appointed; all Bills are paid by this Department. After this a Regular Statement of the Port Fund will be submitted.

54. *Mutlah.*—A Port Master with a full Establishment were appointed in expectation of the long continued cry that many Vessels were actually on their way to the Mutlah.

55. Only eleven have entered during this year, and all of these belong to one Firm, Messrs. John Borrodaile and Co. Every facility has been given by this Department for the landing and loading of these eleven Ships.

56. Out of these eleven one, the *Essex*, was lost on her way out, and the Pilot was dismissed.

57. We have now one Light Vessel, one Pilot Vessel, one Buoy Vessel, and one Receiving Vessel, and Pilots all kept up in expectation of Ships arriving.

58. I can only reiterate my former opinion that the day has not yet come for Ships resorting to the Mutlah, and the present expenditure is only so much money thrown away.

JOHN G. REDDIE, Captain,

Master Attendant.

MASTER ATTENDANT'S OFFICE,
The 10th June 1864. }

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Master Attendant,—(No. 2948, dated the 13th July 1864.)

I AM directed to acknowledge the receipt of your letter No. 1306, dated the 10th ultimo, and in reply to communicate the orders of the Lieutenant-Governor on those points in your Report which require special notice.

2. The general review of the proceedings of the Department will appear in the Annual Administration Report of this Government.

3. The increase in the aggregate tonnage of the Vessels frequenting the Port being 4,13,467 tons in excess of that shown last year is remarkable.

4. I am to inform you that the Lieutenant-Governor has perused with great pleasure your account of the successful manner in which the system of Free Pilots is working, and the fact of their having been during the year only one complaint made to you against a member of the Pilot Service is especially satisfactory.

5. His Honor observes, however, that though in one instance a Vessel grounded and was totally lost, and in thirteen other instances vessels grounded in such a manner as to necessitate trials before a Committee of Enquiry, three Pilots only were punished, and these with extreme leniency; in all the other cases the occurrence was pronounced accidental; and similarly out of twelve collisions which took place in Pilot's Water two only resulted in punishment to the Pilots and the rest were termed accidental. His Honor is unable to concur with you in the opinion that this furnishes any subject for congratulation or that the results are specially creditable to the Pilot Service.

6. Mr. Obbard's Report on the channels of the Hooghly and the measures taken to improve them is satisfactory.

7. With reference to paragraphs 33 to 35, I am to say that the Lieutenant-Governor is glad to find that the duties of the Harbour Master's Department have been conducted very creditably during the year.

8. The Bank of Bengal and the Post Office Department will again be consulted on your proposal that those Offices should either have their own boats for landing Treasure and Mails, or that you should be allowed to charge for the boats that are supplied by the Harbour Master's Department, and the result will be communicated to you.

9. The Report of the Shipping Office is considered satisfactory.

10. The Lieutenant-Governor is quite unable to concur in the opinion which you express in paragraph 56, "that the day has not yet come for Ships resorting to the Mutlah," or that the present expenditure on that Port is money thrown

away. The very facts you have stated, showing that the number of Ships coming to this already overcrowded Port has increased during the last year by 382; that the tonnage has increased by 4,13,467 tons; that thirteen Vessels have grounded on the river during the year; that Mr. Obbard has with considerable difficulty succeeded, by unremitting energy and an ingenious use of rakes, in keeping open the channels, all tend, in the Lieutenant-Governor's opinion, to contradict the conclusion at which you have arrived.

11. In conclusion I am desired to convey to you the thanks of the Lieutenant-Governor for the efficient manner in which the duties of the Marine Department have been conducted during the year under review.

An Agricultural Exhibition to be held at Lucknow, commencing 24th December 1864 and ending 2nd January 1865.

From J. REID, Esq., Secretary to the Chief Commissioner of Oudh, to the Secretary to the Government of Bengal,—
(No. 1779, dated the 3rd June 1864.)

I AM directed by the Chief Commissioner to state that, with the approval of the Supreme Government, an Agricultural Exhibition will be held at Lucknow in the latter part of December 1864, and that he would feel extremely indebted for any aid the Government of Bengal can render in encouraging the inhabitants of its Provinces to enter into competition for Cattle, Produce, and Agricultural Implements. Some Calcutta Firms have promised to support the undertaking by sending Agricultural Implements and Machinery.

2. Prize Lists will be forwarded when ready, and Supplementary Lists of Special Prizes will be sent hereafter.

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CAPTAIN WESTMORELAND.

N. B.—All the above Committees have power to add to their number.

RULES.

- 1.—The Exhibition will be held on the space of ground called the Place, situated between the Kaiserbagh and River Goomtee.
- 2.—The Exhibition will open on 24th December 1864.
- 3.—All Produce and Manufactures (not including Machinery and Implements) to be *bond fide* grown or made in India or Ceylon.
- 4.—All Live Stock to be in the Show Yard three clear days before opening of Show.
- 5.—All samples of Agricultural and other Produce, &c., will be received between 15th November and 16th December 1864, and no later.
- 6.—All Machinery must be fixed at least a fortnight before opening of Exhibition.
- 7.—Intending Exhibitors of Machinery are requested to make application for space required at least two clear months before opening of Exhibition.
- 8.—Exhibitors of Live Stock, Produce, and Manufactures, &c., are requested to send in a list of the articles and animals they intend to exhibit two clear months before opening of Exhibition.
- 9.—All Manufactures and articles of Produce exhibited for *competition* must be accompanied by a certificate that they have been grown or made by the Exhibitor or under his directions.
- 10.—Each sample of Produce sent for competition must have fixed to it a ticket, stating name of Produce, District in which produced, and the quantity of which it is a sample.
- 11.—All Live Stock, Machinery, Manufactures, &c., exhibited and intended for sale must have their price attached to them.
- 12.—Property admitted to compete for the Prizes will not be allowed to be removed until the Exhibition closes without the consent of the Committee.
- 13.—The Committee will not undertake to feed any Live Stock exhibited, but will make arrangements for the supply of all materials necessary for feeding purposes, &c.
- 14.—Provision will be made for the safe custody of Cattle, Implements, &c., but Exhibitors also are required to send persons to remain in charge of the Live Stock, Machinery, &c.
- 15.—Every facility will be given to parties to effect sales, but the Committee will exact a fee of 2½ per cent. upon all sales for benefit of Exhibition Fund.
- 16.—All Live Stock must be removed from the Yard within three days after closing of Exhibition.
- 17.—An admission fee will be exacted on certain days in accordance with the rates printed on cover of Prize List.
- 18.—Whenever any special conditions have been imposed by the Committee a certificate to the effect that such conditions have been complied with must be furnished under the seal and signature of the Chief Magisterial or Revenue Authority of the District in which Exhibitor resides, or of Tehseeldar, Deputy Magistrate, or other Government Officer resident in the vicinity of the Exhibitor's abode.
- 19.—Unless the Prize is specially mentioned for Oude it is understood to be open to all parts of India.

*Prize List of Agricultural Show and Exhibition of Arts and Manufacture
to be held at Lucknow, commencing 24th December 1864.*

LIVE STOCK.	1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
DEPARTMENT I.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>Live Stock.</i>					
CLASS I.					
<i>Cattle.</i>					
For the best Bull owned and bred by a resident in Oude, over two and under five years of age ..	100	50	30	0	180
Ditto ditto owned by a resident in Oude, bred anywhere, over two and under five years of age ...	*				
Ditto ditto of any age open to all comers ...	B. M. 50	30	25	0	105
For the best milch Cow with Calf at foot owned, and bred by a resident in Oude, under seven years of age ...	B. M. 75	40	30	0	145
Ditto ditto owned by a resident in Oude, bred anywhere ...	*				
Ditto ditto open to all comers ...	S. M. 75	B. M. 50	30	20	175
For the best pair of Bulls for draught bred in Oude ...	B. M. 50	B. M. 30	25	20	125
Ditto ditto open to all comers ...	B. M. 50	B. M. 30	25	0	105
For the best pair of Bulls for draught bred in Oude ...	B. M. 50	B. M. 40	30	20	140
Ditto ditto open to all comers ...	B. M. 50	40	30	0	120
For the best pair of draught Bullocks, about fifty-four inches in height, bred and owned by a resident in Oude ...	S. M. 50	B. M. 40	30	20	140
Ditto ditto of any height open to all comers ...	S. M. 50	40	30	0	120
For the best Buffalo Bull ...	B. M. 40	30	20	0	90
Ditto ditto Cow with Calf at foot ...	30	20	10	0	60
For best plough Bullocks ...	B. M. 50	25	0	0	75
Ditto English Bull of pure English blood ...	S. M. 100	0	0	0	100
Ditto Cow ditto ditto ...	S. M. 100	0	0	0	100
Cattle, Rs. ...	...	...	...	...	1,780
CLASS II.					
<i>Horses and Ponies.</i>					
For the best Stallion kept expressly for breeding purposes by a resident in Oude ...	S. M. 100	B. M. 75	50	0	225
Ditto ditto open to all comers ...	S. M. 75	B. M. 50	30	0	155
Ditto ditto Kattiaur bred in Oude ...	S. M. 75	B. M. 50	0	0	125
Ditto ditto Deccanee or Kattiaur open to all comers ...	S. M. 75	B. M. 50	0	0	125
Ditto ditto Brood Mare (of any breed) with foal at foot or in foal, or certified to be kept for breeding purposes by a resident in Oude ...	S. M. 100	B. M. 75	50	0	225
Ditto ditto open to all comers ...	S. M. 75	B. M. 30	20	0	125
Ditto ditto Arab, Deccanee, Kattiaur, &c. ...	S. M. 75	B. M. 50	30	0	155
For the best Colt not over two years old bred in Oude ...	S. M. 50	35	20	0	105
Ditto ditto open to all comers ...	B. M. 40	30	20	10	100

LIVE STOCK.—(Continued.)					1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
					Rs.	Rs.	Rs.	Rs.	Rs.
For the best Filly not over two years old bred in Oude					B. M. 50	30	20	0	100
For the best Filly (no restrictions)					B. M. 40	30	20	10	100
For the best Pony or Galloway over twelve and a half and under fourteen hands					B. M. 25	15	0	0	40
For the best Ass					10	6	0	0	16
For the best Mule					25	15	0	0	40
Horses and Ponies, &c., Rs. ...					...	...	...	...	1,636
CLASS III.					39 Prizes.				
<i>Sheep and Goats.</i>									
For the best Ram of any Indian breed, other than fighting Rams					B. M. 30	20	0	0	50
Ditto of any English breed					S. M. 50	0	0	0	50
Ditto Ewe ditto					S. M. 50	0	0	0	50
Best Doombah Ram					30	0	0	0	30
Ditto Doombah Ewe					30	0	0	0	
For the best Ewes to be exhibited in pens of four, full mouthed					B. M. 30	20	0	0	50
Ditto ditto from four to six teeth					30	20	0	0	50
Ditto ditto from two to four teeth					30	20	0	0	50
Ditto ditto wethers-full mouthed					20	16	0	0	36
Ditto ditto four to six teeth					20	16	0	0	36
Ditto ditto two to four teeth					20	16	0	0	36
Ditto ditto Lambs					20	16	0	0	36
Ditto ditto she Goat in milk, short haired					16	10	0	0	26
Ditto ditto long haired					16	10	0	0	26
Ditto ditto Buck Goat					16	10	0	0	26
Sheep and Goats, Rs. ...					...	...	...	...	582
CLASS IV.					26 Prizes.				
*POULTRY.									
<i>Fowls.</i>									
Pen of five fowls, country-bred (one Cock, four Hens.)					20	10	0	0	30
Ditto Chittagong, ditto					10	6	0	0	16
Ditto Game fowls, ditto					20	10	0	0	30
Ditto Fancy fowls, ditto					10	6	0	0	16
Ditto of four imported fowls					B. M. 30	0	0	0	30
Fowls, Rs. ...					...	...	...	...	122
<i>Guinea Fowls.</i>					9 Prizes.				
Pen of Guinea fowls, (one Cook, three Hens.) of any color					16	10	0	0	26
Best single Cock bird					4	2	0	0	6
Best single Hen bird					4	2	0	0	6
Guinea fowls, Rs. ...					...	...	...	...	38
					6 Prizes.				

LIVE STOCK.—(Concluded.)		1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.
<i>Turkeys.</i>						
Pen of four Turkeys, (one Cock, three Hens,) of any color	...	20	16	0	0	36
Best single Cock bird	...	10	6	0	0	16
Best single Hen bird	...	10	6	0	0	16
Turkeys, Rs.	...	...	...	...	...	68
<i>Geese.</i>						
6 Prizes.						
Pen of one Gander and three Geese	...	16	10	0	0	26
Best Gander	...	4	2	0	0	6
Best Goose	...	4	2	0	0	6
Geese, Rs.	...	...	...	...	...	38
<i>Ducks.</i>						
6 Prizes.						
Pen of one Drake and three Ducks, common	...	10	6	0	0	16
Ditto ditto, fancy	...	10	6	0	0	16
Best Drake	...	4	2	0	0	6
Best Duck	...	4	2	0	0	6
Ducks, Rs.	...	...	...	...	...	44
<i>Pigeons.</i>						
17 Prizes.						
Best cage of three pairs of different sorts	...	10	6	4	0	20
Best pair of Tumblers, sky	...	10	6	0	0	16
Ditto ditto, ground	...	10	6	0	0	16
Ditto Pouters	...	10	6	0	0	16
Ditto Fantails	...	10	6	0	0	16
Ditto Carriers	...	10	6	0	0	16
Ditto Sherazee	...	6	3	0	0	9
Other varieties in pairs	...	10	6	0	0	16
Pigeons, Rs.	...	...	...	...	...	125
<i>Rabbits.</i>						
6 Prizes.						
Best cage of four Rabbits of any breed	...	8	4	0	0	12
Best Buck	...	8	4	0	0	12
Best Doe	...	8	4	0	0	12
Rabbits, Rs.	...	...	...	...	...	36
<i>Abstract of Department I.</i>						
Cattle	...	Rs.	1,780			
Horses and Ponies	...	"	1,636			
Sheep and Goats	...	"	582			
Poultry	...	"	471			
Total Rs.	...		4,469			

AGRICULTURAL IMPLEMENTS.	1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
DEPARTMENT II.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>Agricultural Implements.</i>					
CLASS I.					
<i>Prime Movers.</i>					
For the best horizontal high pressure Steam Engine, eight to sixteen horse power, with boiler, &c., complete ...	200	0	0	0	200
For the best vertical high pressure Engine, four to sixteen horse power, with boiler, &c., complete...	200	0	0	0	200
For the best portable double Cylinder Engine, from ten to eighteen horse power, with driving pulleys, to be used for general purposes, on four wheels and horse shafts ...	200	0	0	0	200
Rs. ...	...	...	...	...	600
CLASS II.					
<i>Implements for Tillage.</i>					
For the best light plough suited for one horse or a pair of bullocks to be used for general purposes..	30	0	0	0	30
For the best native or country-made plough suited to a pair of ordinary sized bullocks ...	30	15	0	0	45
For the best improvement on the country plough to be made of wood or iron, or a combination of both, adapted to a pair of ordinary bullocks and to be used for general purposes, to be of simple construction ...	B. M. 50	0	0	0	50
For the best harrow for light land suitable to a pair of ordinary bullocks ...	15	10	0	0	25
For the best Cultivator, Grubber, or Scarifier of light construction and for use with a pony or single bullock to work between Tea or Cotton rows, and for general purposes ...	30	0	0	0	30
For the best collection of hand tools used in preparing the ground ...	B. M. 30	0	0	0	30
Rs. ...	...	...	...	...	210
CLASS III.					
<i>Implements for Sowing.</i>					
For the best Drill seed sowing machine, suited for various kinds of seed, such as oats, wheat, indigo, &c. ...	B. M. 50	0	0	0	50
For the best broad cast sowing machine ...	30	0	0	0	30
For the best dibble machine or drop sowing implement ...	20	0	0	0	20
Rs. ...	...	...	...	...	100
					3 Prizes.

AGRICULTURAL IMPLEMENTS.—(Continued.)		1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
CLASS IV.		Rs.	Rs.	Rs.	Rs.	Rs.
<i>Implements for Irrigating.</i>						
For the best model of a country-made Persian wheel, complete ...	B. M.	50	0	0	0	50
For the best model arrangement for raising water from walls or tanks to the surface of the ground	B. M.	50	0	0	0	50
For the best collection of working models of country water raising machines for irrigating purposes ...		25	0	0	0	25
Best water wheel adapted to be turned by stream of a River ...		75	0	0	0	75
Best wind power Engine for raising water or turning a mill ...	B. M.	75	0	0	0	75
For the best pump for irrigating purposes adapted to native use ...		50	0	0	0	50
Rs. ...	...	...	...	...	...	325
CLASS V.						6 Prizes.
<i>Harvesting Machines.</i>						
For the best reaping and mowing machine ...		100	0	0	0	100
Rs. ...	...	...	...	...	...	100
CLASS VI.						1 Prize.
<i>Implements for preparing produce for the market.</i>						
For the best thrashing machine of moderate size, to be worked by cattle power and suited to wheat, oats, paddy, &c. ...		100	0	0	0	100
For the best fanner for winnowing grain ...		50	0	0	0	50
For the best Maize or Indian corn sheller to be worked by hand power ...		40	0	0	0	40
For the best native Cotton Gin ...		15	0	0	0	15
For the best improvement on the native Cotton Gin ...	S. M.	100	0	0	0	100
For the best native machine for expressing the juice of Sugarcane ...		50	0	0	0	50
For the best improvement of ditto ...	S. M.	100	0	0	0	100
For the best oil mill of native construction ...		50	0	0	0	50
English oil mill ...		100	0	0	0	100
" Cotton Gin ...		100	0	0	0	100
For the best machinery for converting linseed stalk into flax ...	S. M.	100	0	0	0	100
For the best rice cleaning machine ...		50	0	0	0	50
For the best machinery for separating and preparing the fibre of the Sunn, Hemp, Rheea, Aloe, and other fibre yielding plants ...	S. M.	100	0	0	0	100
For the best hand flour mill of native construction ...		25	0	0	0	25
For the best flour mill of any construction ...		100	0	0	0	100
For the best silk reeling machine ...		25	0	0	0	25
Rs. ...	...	...	...	...	...	1,105
						16 Prizes.

AGRICULTURAL IMPLEMENTS.—(Concluded.)		1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
CLASS VII.		Rs.	Rs.	Rs.	Rs.	Rs.
<i>Farm Yard Implements.</i>						
For the best chaff cutter to be worked by hand power	...	30	0	0	0	30
For the best grain splitter	...	30	0	0	0	30
For the best hand power oil cake crusher	...	s. m. 50	0	0	0	50
For the best collection of feeding troughs, for cattle, sheep, pigs, and fowls	...	40	0	0	0	40
For the best collection and arrangement for stable fittings, utensils, &c.	...	50	0	0	0	50
Rs. ...	...	...	...	...	...	200
CLASS VIII.						5 Prizes.
<i>Agricultural Carriage, Harness, Gear, &c.</i>						
For the best four bullock hackery, built in Oude	...	75	50	0	0	125
Ditto three ditto	...	75	50	0	0	125
Ditto two ditto	...	50	30	0	0	80
For the best hackery of any size open to all comers	...	75	0	0	0	75
For the best, substitute, or improvement on the native hackery	...	s. m. 100	0	0	0	100
For the best, simplest, and most easy fitting yokes for bullocks for field or road use	...	25	0	0	0	25
For the best bullock gear for field purposes	...	20	0	0	0	20
Rs. ...	...	...	...	...	...	550
CLASS IX.						10 Prizes.
<i>Dairy Implements.</i>						
For the best churn, European or Foreign	...	25	0	0	0	25
For the best country-made churn	...	15	0	0	0	15
For the best butter worker	...	15	0	0	0	15
For the best collection of butter prints	...	15	0	0	0	15
For the best collection of earthen-ware, glass, or enamelled milk pans	...	25	0	0	0	25
Rs. ...	...	...	...	...	...	95
CLASS X.						5 Prizes.
<i>Miscellaneous Implements.</i>						
For the best corn, grain, or other seed holder on a large or small scale, having regard to preventing damp and destruction by rats or other vermine	...	20	0	0	0	20
For the best collection of felling axes of various sizes, pruning knives and saws, bill hooks, and various kinds of shears	...	50	0	0	0	50
For the best machine adapted to agricultural or farm yard purposes suited to the wants of the native agriculturist	...	s. m. 100	0	0	0	100
N. B.—Prizes will be withheld or modified if the Judges are not satisfied with the improvement or merit of the articles exhibited.						
Rs. ...	...	...	...	...	...	170
						3 Prizes.

MISCELLANEOUS IMPLEMENTS.—(Continued.)	1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.
Amount of Prizes for Department II., S,450.					
<i>Abstract of Department II.</i>					
Prime Movers ...	600				
Implements for Tillage ...	210				
Ditto for Sowing ...	100				
Ditto for Irrigating ...	325				
Harvesting Machine ...	100				
Implements for preparing produce for markets ...	1,105				
Ditto for Farm Yard ...	200				
Agricultural Carriage, Harness, Gear, &c. ...	550				
Dairy Implements ...	95				
Miscellaneous Implements ...	170				
Total Rs. ...	3,455				
DEPARTMENT III.					
SECTION A.					
<i>Agricultural and Dairy Produce and Raw Material.</i>					
CLASS I.					
<i>Country Dairy Produce.</i>					
Fresh butter, not less than 2 lbs. in weight ...	10	5	0	0	15
Jar of Salt butter, not less than 5 lbs. in weight ...	10	5	0	0	15
Cheese, of not less than 4 lbs. in weight ...	10	5	0	0	15
Ditto Cream, of not less than 2 lbs. in weight ...	6	3	0	0	9
Ghee, Cow's, not less than twenty seers in weight...	20	10	0	0	30
Buffaloe's, ditto ditto ...	20	10	0	0	30
Dairy Produce, Rs. ...	...	...	...	...	114
N. B.—All Dairy Produce must be brought and exhibited on the first day of Show.					
				12 Prizes.	
CLASS II.					
<i>Grain.</i>					
To be exhibited in samples of five seers as <i>certified</i> samples of not less than ten maunds.					
Wheat ...	10	7	5	4	26
Barley ...	10	7	5	0	22
Oats ...	10	7	5	0	22
Indian Corn ...	10	7	5	0	22
Bajra ...	10	7	5	0	22
Jowar ...	10	7	5	0	22
Rice ... { Table ...	25	15	10	5	55
Common ...	10	7	5	4	26
Grain, Rs. ...	...	...	...	...	217
				27 Prizes.	

AGRICULTURAL AND DAIRY PRODUCE AND RAW MATERIAL.—(Continued.)		1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
CLASS III.		Rs.	Rs.	Rs.	Rs.	Rs.
<i>Pulse.</i>						
To be exhibited in samples of five seers as <i>certified</i> samples of not less than ten maunds.						
Gram	...	10	7	5	0	22
Peas	...	10	7	5	0	22
Best collection of Dals, five or more varieties	...	15	10	5	0	30
Pulse, Rs.	...	...	...	...	...	74
CLASS IV.						
<i>Tubers.</i>						
Potatoes, (five seers as samples of five maunds)	...	20	10	5	0	35
Sweet potatoe, (ditto)	...	8	5	3	0	16
Turmeric, (ditto of one maund)	...	8	5	3	0	16
Ginger, (ditto)	...	8	5	3	0	16
Arrowroot, (ditto)	...	8	5	3	0	16
Yams, (ditto)	...	8	5	3	0	16
Tubers, Rs.	...	...	...	...	...	115
CLASS V.						
<i>Fibres.</i>						
To be exhibited in samples of five seers as <i>certified</i> samples of not less than five maunds <i>pucca</i> .						
Flax	... B. M.	50	25	15	0	90
Patsum	...	20	10	5	0	35
Sunn (of Sunnaee plant)	...	20	10	5	0	35
Bhung (real hemp)	...	20	10	5	0	35
Any other fibre	...	12	8	5	0	25
Fibres, Rs.	...	...	...	...	...	220
CLASS VI.						
<i>Cotton and Wool.</i>						
The Cotton to be exhibited in samples of two seers as samples of not less than five maunds <i>pucca</i> , each sample to be composed of a portion cleaned and a portion uncleaned Hybrid Cotton						
New Orleans	... B. M.	75	50	25	10	160
Egyptian	... S. M.	75	50	25	10	160
Peruvian	...	50	30	20	0	100
Indigenous Dharwar	...	50	30	20	0	100
" Berar	...	50	30	20	0	100
" Common	... B. M.	75	50	25	10	160
Ten seers of Wool as sample of five maunds	... B. M.	75	50	25	10	160
Cotton and Wool, Rs.	...	...	...	...	...	1,040

28 Prizes.

AGRICULTURAL AND DAIRY PRODUCE AND RAW MATERIAL.—(Continued.)		1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
CLASS VII.		Rs.	Rs.	Rs.	Rs.	Rs.
<i>Raw Silk.</i>						
To be exhibited as Silk on the Cocoon in quantities of 100 Cocoons for first, fifty Cocoons for second, and twenty Cocoons for third Prize.						
Cashmere	...	50	30	20	10	110
China or other kind	...	50	20	15	10	95
Tussah	...	10	7	4	0	21
Reeled Silk, not less than 1 lb.	...	B. M. 75	50	30	10	165
Raw Silk, Rs.	...	...	...	...	...	391
CLASS VIII.						15 Prizes.
<i>Dyes.</i>						
To be exhibited in samples of one seer as certified samples of not less than five seers.						
Safflower	...	15	10	5	0	30
Lac Dye	...	B. M. 40	20	10	0	70
Indigo, produce of Oude	...	B. M. 50	20	10	0	80
Dyes, Rs.	...	...	...	...	...	180
CLASS IX.						9 Prizes.
<i>Oil Seeds.</i>						
To be exhibited in samples of five seers as certified samples of five maunds <i>pucca</i> .						
Linseed	...	12	9	6	4	31
Mustard	...					31
Til Seed	...					31
Castor Seed	...					31
Mohwah Nut	...					31
Kusoom Seed (barré)	...					31
Poppy Seed	...					31
Cotton Seed	...					31
Oil Seed, Rs.	...	...	...	...	...	248
CLASS X.						32 Prizes.
<i>Tobacco.</i>						
To be exhibited in leaf well dried, in samples of five seers.						
Native	...	30	20	10	6	66
Foreign	...	25	10	5	0	40
Tobacco, Rs.	...	...	...	...	...	106
						7 Prizes.

AGRICULTURAL AND DAIRY PRODUCE AND RAW MATERIAL.—(Concluded.)		1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
CLASS XI.		Rs.	Rs.	Rs.	Rs.	Rs.
<i>Sugarcane and Raw Sugar.</i>						
Ten canes as the sample of the produce of not less than one beegah pucca.						
Ordinary cane	...	B. M. 40	20	10	0	70
Pownda or Otaheity canes	...	25	15	10	0	50
Rab (twenty seers)	...	15	8	6	0	29
Goor (twenty seers)	...	15	8	6	0	29
Sugarcane and Raw Sugar, Rs.	...	...	...	...	...	178
CLASS XII.						
<i>Honey and Wax.</i>						
Honey in the comb (sample of two seers)	...	15	10	5	0	30
Wax, unbleached, (sample of two seers)	...	10	6	4	0	20
Honey and Wax, Rs.	...	...	...	...	...	50
<i>Amount of Prizes for Department III.</i>						
Country Dairy Produce	...	114				
Grain	...	217				
Pulse	...	74				
Tubers	...	115				
Fibres	...	220				
Cotton and Wool	...	1,040				
Raw Silk	...	391				
Dyes	...	180				
Oil Seeds	...	248				
Tobacco	...	106				
Sugarcane, &c.	...	178				
Honey and Wax	...	50				
Total Rs.	...	2,933				

12 Prizes.

6 Prizes.

A Prize will be awarded for any other article of produce, &c., not included in the above List, and which may be considered deserving of one by the Judges.

N. B.—The above articles of produce to be accompanied by a certificate that they have been grown by or produced under the direction of the Exhibitor. It is desirable, if possible, that the samples of grain be accompanied by a sheaf in order to show the quality of the crop as it stood on the field.

PRIZE LIST OF EXHIBITION OF ARTS AND MANUFACTURES.

Abstract.

Department I. (Live Stock)	...	Rupees	4,469
Ditto II. (Agricultural Implements)	...	"	3,455
Ditto III. (Ditto Produce, &c.)	...	"	2,933
Total Prizes for Agricultural Show, Rupees			10,857

SECTION B.

Raw material used for Food, Manufactures, Pharmacy, &c.

Class I.

CHEMICAL AND PHARMACEUTICAL SUBSTANCES.

- A.—Animal.
- B.—Vegetable.
- C.—Mineral.

Amount to be given in Prizes.
Rupees 100.

Class II.

SUBSTANCES USED FOR FOOD AND MANUFACTURES, &c.

- A.—Dried fruits, preserves, pickles, &c.
- B.—Tea and Coffee.
- C.—Spices.
- D.—Saccharine produce.
- E.—Fixed oils.
- F.—Essential oils.
- G.—Dyes.
- H.—Mordants.
- I.—Miscellaneous.

Amount to be given in Prizes.
Rupees 700.

<i>Abstract.</i>					
Class I.	...	...	...	Rupees	100
„ II.	..	...	...	„	700
Total Rupees				...	800

DEPARTMENT IV.

SECTION A.

Manufactures.

Class

- I. Cotton Fabrics.
- II. Woollen „
- III. Silk „
- IV. Fibrous Manufactures.
- V. Embroidered Fabrics and Brocades.
- VI. Jewellery, enamelling works in precious metal and their imitations.
- VII. Hardware and Cutlery.
- VIII. Porcelain and Pottery, including bricks, tiles, &c.
- IX. Glass Manufactures.
- X. Furniture and Upholstery.
- XI. Ornamental carving in wood and ivory.
- XII. Leather manufactures.
- XIII. Paper.
- XIV. Fancy work in paper, wax, worsted, bamboo, cane, beads, &c.
- XV. Arms and Accoutrements.
- XVI. Conveyances.
- XVII. Manufactures not included in the above.

Amount to be given in Prizes.
Rupees 1,800.

SECTION B,
Fine Arts.

Class

- I. Models and Statuary.
- II. Engraving, printing, and lithography.
- III. Photography.
- IV. Manuscripts, drawings, and paintings.
- V. Fine Arts not included in the above.

Amount to be given in Prizes.
Rupees 800

SECTION C.

Machinery and other Instruments used in arts and manufacture and scientific.

Amount to be given in Prizes.
Rupees 700.

Abstract of Department IV.

Section A.	...	...	...	Rupees	1,800
" B.	...	...	...	"	300
" C.	...	...	...	"	700
Total Rupees					2,800

RATES OF ADMISSION.

Season Ticket (not transferable)	...	...	...	Rs.	3	0	0
First day	...	...	...	"	2	0	0
Second day	...	...	...	"	0	4	0
Third day	...	...	...	"	0	4	0
Last day	...	...	...	"	1	0	0
Remaining days	...	...	...	...	Free.		

Correspondence regarding the mode in which the evidence of Witnesses in Criminal cases should be recorded.

From F. B. PEACOCK, Esq., Officiating Registrar of the High Court of Judicature at Fort William in Bengal, to F. R. COCKERELL, Esq., Officiating Secretary to the Government of Bengal,—(No. 1561, dated the 16th May 1864.)

In reply to paragraph 3 of your letter 6559 of the 29th August last, I am directed to state that the question of whether "the practice of taking down the evidence in Criminal cases in English might not with advantage be introduced generally throughout the whole Lieutenant-Governorship in Bengal" has been attentively considered by the Judges of the High Court, who are of opinion that if the Lieutenant-Governor is thoroughly satisfied that all the Magistrates serving in Bengal possessed a sufficient knowledge of the vernaculars of the Districts to which they are appointed, and if the provisions of Section 198, Code of Criminal Procedure, (regarding the mode in which the evidence of witnesses in Criminal cases should be recorded,) are strictly complied with, the adoption of the course proposed would be most advantageous, inasmuch as it would lessen the power of interference on the part of Native Ministerial Officers, ensure a speedy dispatch of business, and place the Magistrate in more direct communication with the parties attending before him; but I am to add that many of the Judges are of opinion that Magistrates in the interior are not at the present time competent with respect to their knowledge of the language to be vested with these powers, and the experiment would, therefore, in the judgment of the Court, be attended with great risk of injustice. I am further to observe that if the changes proposed were carried out the greatest care would be necessary, before removing an Officer from one District to another, to

ascertain that he was thoroughly conversant with the vernacular language of the District to which he was about to be removed, as a perfect acquaintance of the languages current in Bengal Proper would not qualify a Magistrate to exercise these extraordinary powers in Behar or Orissa.

From the HON'BLE A. EDEN, Secretary to the Government of Bengal, to the Officiating Registrar of the High Court of Judicature at Fort William in Bengal,—(No. 1158T, dated Darjeeling, the 30th June 1864.)

I AM directed to acknowledge the receipt of your letter No. 1561, dated the 16th ultimo, and to refer to that part of it which conveys the opinion of the Court as to whether the practice of taking down evidence in English which has already been adopted with success in Assam and other Non-Regulation Districts might not with advantage be introduced generally throughout the whole of the Lieutenant-Governorship of Bengal.

2. Upon this most important question the Hon'ble Judges are of opinion that, if the Lieutenant-Governor is thoroughly satisfied that the Magistrates serving in Bengal possess a sufficient knowledge of the vernaculars of the Districts to which they are appointed, and if the provisions of Section 198 of the Code of Criminal Procedure are strictly complied with, the adoption of the course proposed by the Lieutenant-Governor would be most advantageous, inasmuch as it would lessen the power of interference on the part of Native Ministerial Officers, ensure a speedy dispatch of business, and place the Magistrates in more direct communication with the parties attending before them.

3. But many of the Judges are of opinion that Magistrates in the interior are not at the present time competent with respect to their knowledge of the language to be vested with these powers, and the experiment would, therefore, in the judgment of the Court, be attended with great risk of injustice. And the Court further

observe that if the experiment be carried out the greatest care will be necessary, before transferring an Officer from one District to another, to ascertain that he is thoroughly conversant with the vernacular language of the District to which he is transferred, as a perfect acquaintance with the languages current in Bengal Proper do not qualify a Magistrate to exercise these extraordinary powers in Behar or Orissa.

4. These extraordinary powers, it will be borne in mind, simply amount to this, that the Magistrate shall take down the evidence of witnesses with his own hand in the vernacular language of the Magistrate, unless he be prevented by any sufficient reason from taking down the evidence of any witness, in which case he shall record the reason of his inability to do so, and shall cause the evidence to be taken down in writing, as is now commonly done, from his dictation in open Court.

5. The Lieutenant-Governor is so deeply impressed with a sense of the advantages to be gained by requiring Magistrates in all practicable cases to take down evidence with their own hand—advantages which cannot be expressed in more forcible language than that which the Court have used—that he is unwilling to postpone the general introduction of so beneficial a change except on considerations of great weight; and, though he agrees with the Court in thinking that if the Magistrates are ignorant of the Native languages the changes would be attended with some risk of injustice, yet it seems to His Honor that the risk would not be greater, but rather less, than it is when, as at present, the evidence is taken down in the Native language of a District under the personal direction and superintendence of the very same Magistrates whose ignorance of that language the argument presumes.

6. A Magistrate partially ignorant of the Native language must by some means or other arrive at a distinct knowledge of what a witness says before the evidence is written down, whether it be written by a Clerk under the Magistrate's personal direction, or by the Magistrate himself; and, as the evidence after being taken down must be read over to the witness in a language which he understands, and acknowledged to be correct, there seems to be quite as much reason to depend upon the record in the latter case as in the former. And it can hardly be denied that when a Magistrate has to record evidence with his own hand there is an assurance that he pays attention to the witness and makes a real endeavour to understand what he says, which, when the evidence is taken down by a Clerk, is wholly wanting.

7. But the Lieutenant-Governor must venture to record an opinion somewhat at variance with that of some of the Hon'ble Judges as to the extent to which the Magistrates in the interior are acquainted with the Native languages. With the exception of recently passed Assistants and newly appointed Deputy Magistrates, who are vested only with the lowest Judicial powers and are competent to try only the most trivial and petty cases, the Lieutenant-Governor does not believe that there is a single Magistrate in the whole of the Lower Provinces who has not a sufficient

knowledge of the Native language of the District in which he is employed to understand nearly all that a witness says and to take it down correctly in his own language. There may be a word now and then or an idiomatic expression which is strange to some of the younger Magistrates exercising higher powers, but there is always an Interpreter at hand, and all such Magistrates are perfectly capable of judging whether the interpretation given is correct or not. Whatever may have been the case in former times the Examination Rules, which have now been in force for these fifteen years past, provide a sure guarantee that Magistrates cannot now be otherwise than well acquainted with the languages at least of Bengal and Behar, while of Orissa it may be safely said that a large proportion of the inhabitants are themselves acquainted with either Bengali or Hindustani, and that any Magistrate having a competent knowledge of those two languages can with a month's practice understand what a witness says in the Oorya language as well as if he were speaking in either of the others. Nevertheless the Lieutenant-Governor will, as the Court suggest, take special care, as far as the exigencies of the Service permit, that Officers appointed to be Magistrates in Orissa shall possess a previous knowledge of the language of the Province.

8. His Honor further begs to add that in the Assam and other Non-Regulation Districts, where all the Magistrates of every grade have for a long time been obliged to take down evidence in their own language, the younger Officers are, as a rule, less familiar with the Native languages than those in the Regulation Districts, and that the complete success which has attended the practice wherever it has been adopted affords ample ground for a confident expectation that it will not be less successful if introduced universally throughout the rest of this Lieutenant-Governorship.

9. The Lieutenant-Governor, therefore, under the power vested in him by Section 196 of the Code of Criminal Procedure, is pleased to direct that in every District of the Lower Provinces the evidence of witnesses shall be taken down by the Magistrate with his own hand and in his own vernacular language, unless he be prevented by any sufficient reason from taking down the evidence of any witness, in which case he shall record the reason of his inability to do so, and shall cause the evidence to be taken down in writing from his dictation in open Court. His Honor is further pleased to direct that if the vernacular language of any Magistrate be neither English nor the language of the District in which his Court is held, he may take down the evidence in English, or in the language of the District, instead of in his own vernacular.

10. I am desired by the Lieutenant-Governor to request that the Court will be so good as to give effect to this direction, and, if the Hon'ble Judges think proper, to furnish the Magistrates with any precautionary instructions that may be required as to the mode in which evidence is to be taken under Section 198 of the Code, and as to the "sufficient reasons" which should justify them in not taking down evidence with their own hand and in causing it to be taken down in writing from their dictation.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, AUGUST 17, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of six Rupees per annum if delivered in Calcutta, or twelve Rupees if sent by Post.

No Official Orders or Notifications, the publication of which in the GAZETTE is required by Law, or which it has been customary to publish in the GAZETTE, will be included in the SUPPLEMENT: For such Orders and Notifications the body of the GAZETTE must be looked to as heretofore.

Correspondence on the subject of improving the breed of Bengal Cattle and the Cultivation of Vegetables for the consumption of European Troops.

From the HON'BLE A. EDEN, Secretary to the Government of Bengal, to the Officiating Secretary, Agricultural Society,—(No. 981T., dated Bhaugulpore, the 6th October 1863.)

I AM directed to request that the Society will have the goodness to favor the Lieutenant-Governor with a report as to the best means of improving the breed of Bengal cattle with special reference to their capacity for draught, and for preventing further degeneracy, such as is believed to have taken place in the breed of late years.

2. I am to ask whether there is good reason to believe that such degeneracy has really occurred, and if so, what, in the opinion of the Society, are the causes of it, and what means can be properly taken by the Government, or by private associations and individuals, to remedy the evil.

From BABOO JOTSENDRO MOHUN TAGORE, Honorary Secretary to the British Indian Association, to F. R. COCKERELL, Esq., Officiating Secretary to the Government of Bengal,—(dated the 5th February 1864.)

I HAVE the honor, by direction of the Committee of the British Indian Association, to acknowledge the receipt of Mr. Secretary Eden's letter of the 6th October last, requesting, for the information of His Honor the Lieutenant-Governor, the opinion of the Association, "*first*, as to the best means of improving the breed of Bengal cattle with special reference to their capacity for draught, and for preventing further degeneracy, such as is believed to have taken place in the breed of late years; and *secondly*, whether there is good reason to believe that such degeneracy has really occurred, and if so, what are the causes of it, and what means can be properly taken by the Government, or by

private associations and individuals, to remedy the evil."

In reply I am desired by the Committee to state that there can be no doubt that there has been a partial deterioration in the breed of the Bengal cattle of late years. The climate of the country does not certainly favor the growth of a strong and hardy breed, such as flourishes in the cold regions of Europe, or even in the Upper Provinces of India. In Bengal the cattle are naturally of small size and weight, and less capable of active work, though possessed to a marvelous degree of enduring patience. But the observation of the past quarter of a century shows that there has been a visible deterioration in the breed, and the Committee attribute it to the following causes, *viz.*: *first*, the want of good pasture; *second*, over-work; *third*, periodical murrain; and *fourth*, defective breeding.

The want of generous pasture is very severely felt. In the days of the Hindoo Kings of this country there were cattle grounds, cattle roads, and cattle tanks, and the Hindoo Law would not allow compensation to a person for cattle trespass if his field, lying on the side of the cattle road, had not been properly fenced. Down to the time of the Permanent Settlement the pasture lands were kept by the Zemindars exclusively for the grazing of the cattle on the charge of a moderate rent or a quota of ghee; but the British Government, in making the settlement, resumed the sayer duties hitherto levied by the Zemindars, and it left the Landholders' pasture lands, bunkar and phulkar, attached to their Estates, giving them absolute freedom of settling these appendages to their property in such manner as they might think proper. In the proportion waste lands are being brought into cultivation pasture lands for cattle are also disappearing. Twenty or thirty years ago there was scarcely an Estate which had not a large pasturage for the grazing of cattle; but the enhancement of the

prices of agricultural produce, and the consequent profitableness of cultivation, have led the Ryot to gradually encroach upon every pasture field susceptible of cultivation with cereals or other crops. Save in the Districts of Nuddea, Moorshedabad, Rungpore, and Beerbhoom, where high lands are to be met with, are thin areas left as pasture ground, but that also in cases in which cultivation cannot be carried on with profit. For instance, the poverty of the land in Kishnaghur requires rest every alternate year, and the field in every such year is necessarily used as pasturage for the cattle. In Rungpore the chur land on its first formation is not fit for cultivation, the bed of sand lying too close to the surface to admit of ploughing, and the Ryot consequently finds it more to his advantage to allow the cattle to graze on it, which has the effect of manuring the land and preparing it for culture at a future season. But as soon as the chur becomes fit for cultivation, the cattle are removed to another chur less favorably situated and where the pasture is necessarily poor. It will be thus seen that even in those Districts where nature compels the Ryot to leave pasture grounds such pasturage is held subordinate to purposes of cultivation, and that cultivation no sooner becomes possible than the pasturage is broken up. Deprived of the healthy, generous, and invigorating food of nature, the cattle are left to subsist upon such allowance of straw and other food as the Ryot is able to supply, and it need hardly be observed that in the present enhanced prices of all agricultural produce the keep of the cattle has become excessive costly.

Added to the want of pasture or adequate supply of food, the other privations which the cattle undergo, such as the want of proper housing and tending, and the little care generally taken of them, have naturally a deteriorating effect upon their constitution, and diminish their power both for milkiness and work.

If the cattle are so ill-fed and so ill-tended, they are, on the other hand, most injuriously overworked, partly owing to the increased prices of all articles of food, both of men and cattle, and partly owing to the diminution of the number of the cattle caused by the periodic murrain, which has of late become more fatal than before. Besides, the prices of cattle have of late increased proportionately with the expenses of their keep, so much so, that the Ryot now makes one pair of bullocks do the work of two, which the latter cannot sustain without injury to health, and the animals necessarily become stunted in growth, short-lived, and less enduring. With the seeds of physical deterioration thus sown it can be easily imagined that the progeny must be weak and unhealthy, and as the deterioration must increase from generation to generation the evil, unless it were arrested before it was too late, must spread to the detriment of the people.

While the latter offsprings of the Bengal cattle are so weak and unhealthy, in consequence of the physical deterioration which has been going on in the parents for some years past, it need also be remembered that no care is taken in breeding, and that consequently deterioration has been rapid. The race of Brahmince bulls, which was formerly abundant in all parts of the country, is fast disappearing by being employed by Municipal Committees in the Presidency Town as well as in the

Mofussil, and the people are necessarily left to the scanty stock of immature and degenerate bulls maintained by the villagers for breeding purposes. It is also worthy of remark that the neglect of the people in rearing the cattle, particularly for agricultural purposes, may be accounted for by the circumstance that the soil being naturally soft, their requirements, so far as the employment of bullock-power is concerned, are easily met.

The Committee have already referred to the great havoc among the cattle caused by the periodic murrain. It is of the utmost importance, they submit, to ascertain the mortality occasioned by pox and other diseases, and how far these diseases have led to physical deterioration. This information can be more satisfactorily obtained by Government than by private individuals.

With regard to the improvement of the Bengal cattle, the Committee are of opinion that cross-breeding may be reckoned as the most important. It is reasonable to suppose that cross-breeding will do for the bovine what it has already effected for the equine race in the Upper Provinces. The pure English, or the Australian, or the Cape cattle, it is feared, will not multiply here freely. The climate is against their growth, but by crossing they may be so far acclimatized as to secure to the country cattle the bone, muscle, and milkiness of the foreigners. The practicability of attaining success by cross-breeding is evidenced in the improved condition of Commissariat and Artillery bullocks.

The improvement, in order to be successful, requires, in the humble opinion of the Committee, the co-operation of both Government and Landholders. It is in the first place of the highest importance to acquaint the Landholders and Farmers with the advantages of a superior breed of cattle, and the practicability of its being reared up in Bengal at a moderate cost. For such a purpose the Committee think Cattle Farms may, with advantage, be opened experimentally in certain Districts, either at the sole expense of Government, or, where the Landholders are intelligent enough to appreciate the benefit of the experiment, at the joint expenses of Government and Landholders. The Committee would, however, prefer to see the efforts of Government directed through the media of Mofussil Municipal Committees and the Commissariat Department. Both these Departments require the services of strong and hardy bullocks for draught purposes, and if the Government will influence the Officers of these Departments to import Colonial, or Hurriana, or Nagore bulls for the purpose of cross-breeding, and allow the villagers the benefit of those animals, much may be effected in the way of improvement. The influence of the District Officers also, if properly directed, will be extremely useful in promoting this object, and the Committee believe that a better agency for systematic work cannot be provided than the late Local Agricultural Committees, which may be continued with addition to their number if necessary. If the District Officials take a zealous and active interest in the work, and if the views of the Government are properly explained, and the spirit of activity and emulation, which must have been induced by the late Agricultural Exhibition, be kept up, the Committee have no doubt that the Landholders will not be backward in co-operating with Government in the furtherance of this useful and important undertaking.

To the above scheme of operations the Committee would recommend the supplementing of periodical Cattle Shows. Such shows, and the inducement of prizes so distributed as to foster cross-breeding, which must form a part of the system, will be extremely useful in providing a motive to exertion, in engendering a spirit of emulation, and in awakening a desire for improvement. In giving prizes for Cattle Shows the Committee would, for instance, set a high prize upon a *bona fide* English or Colonial bull brought up for six months certain in a District. A competition to win such a prize would necessarily contribute to the improvement of the Bengal breed by the importations and rearing of strong foreign bulls. The history of agricultural improvement in England places, beyond dispute, the utility of Agricultural Exhibitions, and what has been achieved there, the Committee see no reason to doubt, may be achieved in India under like circumstances and like conditions.

As for securing the reservation of pasture lands for the use of the cattle, or preventing their being ill-tended or over-worked, much will depend on the value which the agricultural population will attach to a better or stronger breed of cattle. The Committee are not aware of any reasons which may not supply Bengal, like England, with good pasture lands under like conditions. If the Landholders or Ryots can obtain remunerative rents for lands fit for pasturage, the Committee see no reason to doubt that they will not divert such lands from cultivation.

In conclusion the Committee beg leave to offer their best acknowledgments to His Honor the Lieutenant-Governor for directing his attention to this vitally important subject. They need hardly remind His Honor that the Hindoo Kings of India always held the proper tending and improvement of the cattle an object of primary importance. They cannot too strongly regret the indifference and apathy with which the community has suffered the present deterioration to work its pernicious effects. They have, however, no doubt, that, with the attention of the Government fully awakened to the magnitude of the subject, the progress of the evil will be arrested.

From J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, to F. R. COCKRELL, Esq., Officiating Secretary to the Government of Bengal, — (dated the 27th February 1864.)

I HAVE to acknowledge receipt of Mr. Secretary Eden's letter No. 983T. of the 6th October, requesting the Association to report—

1st.—As to the best means of improving the breed of Bengal cattle with special reference to their capacity for draught.

2ndly.—As to whether the breed has degenerated of late years, and if so, as to the causes of such degeneracy, and as to the means to be adopted to remedy the evil.

I am desired by the Committee to apologise for the delay which has occurred in answering the above; but it was thought desirable, before replying to it, to communicate largely with the Mofussil Members engaged in agricultural pursuits, so as to obtain the benefit of their experience, and to make the information offered by the

Association applicable to as large an extent of country as possible.

With regard to the second portion of the enquiry, which it will be convenient to take up first, I am directed to say that both from the observation of the Calcutta Members of the Association, and from the information obtained from those residing in the Mofussil, the Committee are satisfied that no general deterioration of the breed of cattle has taken place.

It is believed that the draught bullocks now employed in Calcutta are quite as good generally as they have been for many years, and with one exception the Mofussil Members consulted have all given their opinion that the cattle have not degenerated, and some consider them to have improved.

The exception to which I have referred is Mr. Terry, of Midnapore, who considers the breed to have degenerated for some time, and more so for the past ten years.

Making allowance for this exception as regards the Midnapore District, the result arrived at by the Association is, that in Calcutta the bullocks employed are fully as good now as they have been for many years, and that from Tirhoot to Jessore the breed has not degenerated.

There is no doubt that draught bullocks have greatly risen in cost, partly from casual and temporary causes, and partly from the great increase that has taken place in the area of land under the plough, which at the same time has enhanced the demand for plough bullocks, and has diminished the waste or pasturage lands available for the rearing of cattle.

There has been unusual mortality amongst the cattle in Lower Bengal, which has added to the scarcity and to the enhanced cost of cattle naturally consequent on a great extension of cultivation; and the Committee are inclined to think that the increased difficulty in procuring draught bullocks has given rise to the idea that the breed of cattle has degenerated.

In regard to the first part of the enquiry, *viz.*, the best means of improving the breed of Bengal cattle with special reference to their capacity for draught, I am directed to say that, whilst satisfied that no degeneracy in the breed has taken place, the Committee are of opinion that there is room for improvement, though by means which cannot be very greatly influenced either by Government or by private associations; but if consideration of the subject should prevent attempts at improvement in an unwise direction, the enquiry will not have been without benefit.

The Committee feel satisfied that no improvement in the breed of draught cattle can be expected by the introduction of any foreign cattle, and they greatly doubt whether the use of bulls of any larger Indian breed would be advantageous, and therefore they consider that improvement is only to be obtained with any certainty by selection from the present breed and from improved feeding of the young stock.

The great mortality amongst the cattle of Lower Bengal of late years, alluded to in the earlier part of this letter, occurred after high and long inundations, and is believed to have been caused in a great measure, if not altogether, by the starvation to which the cattle were subjected

during the period the country was under water, and until there was a new growth of food after the subsidence of the rivers, as the people generally make no provision of food for their cattle for those seasons of the year when it is likely to be scarce and precarious.

It is this absence of all provision for feeding their cattle which at the same time presents obstacles to the improvement of their own breed, and which makes the introduction of a larger breed undesirable.

In a level country and on metalled roads the present hackery bullocks do their work wonderfully well, and it is not believed that any animals can be found to move the merchandize over the roads in Calcutta so cheaply as is done by those now employed, regard being had to their first cost, the work they perform, and the food they eat.

No doubt that for dragging carts over unmetalled roads, and for ploughing many descriptions of soil, heavier and larger cattle would be desirable; but unless better kept than the majority of those belonging to the agricultural classes, bullocks of a larger breed would be likely to fall into such low condition as to be unable to do the work at all.

As a rule no cattle are reared in Bengal for food, and therefore all cows will be used for breeding, and the selection required for improvement must therefore necessarily be confined to the bulls; but if any means could be found to induce the owners of cows to put them to selected bulls the effect would, no doubt, be highly advantageous.

At present the general body of Native breeders are altogether careless of the quality of the bulls to which their cows are put, and very frequently the bulls seen with cows would seem to have been kept entire, simply because they were too small and weak to find a market for draught purposes, and if any means could be suggested for preventing these small bad animals from being allowed to go at large with the cows, or from being kept entire, one great point towards the improvement of the breed would be obtained.

Mr. Forbes, of Purneah, giving the result of thirty-three years' observation, and speaking of people in the District who profess cattle-breeding, writes:—"The above breeders select one or two best bull calves out of the number they may have in their herd and keep for bulls, and no other bulls are admitted into their herds."

The result of this conduct is shown in an earlier part of Mr. Forbes' letter, in which he says that "I do not find the breed of cattle to have degenerated in any way; if anything, there is an evident improvement," and no doubt if the Native rearers of cattle generally could be induced to take the same precautions as to the bulls they breed from, the improvement observed by Mr. Forbes would be general, particularly if at the same time they could be induced to feed their young stock better than is now usually done.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Secretary to the Agricultural and Horticultural Society,—(No. 1304, dated the 14th March 1864.)

IN continuation of the letter from this Office No. 981T, dated 6th October last, relative to the best means of improving the breed of Bengal cattle, I am directed to forward the accompanying series of letters from the British Indian

Association and Landholders' and Commercial Association, dated, respectively, the 5th and 27th ultimo, and to request that the Society will be so good as to favor the Lieutenant-Governor with an expression of their views on the subject.

2. I am to suggest to the Society the preparation of a brief Manual in Bengalee, Oordoo, and Oorya, calling the attention of Agriculturists to the importance of preserving and improving the quality of stock by carefully selecting bulls for breeding purposes, and by reserving a sufficient quantity of land in each village for pasture, with practical suggestions to this end.

3. With reference to the recommendation of the British Indian Association in favor of Cattle Shows, I am to observe that the question will be taken up by the Lieutenant-Governor on the receipt of the Report which the Exhibition Committee have been desired to submit to Government.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Honorary Secretary to the British Indian Association,—(No. 1305, dated the 14th March 1864.)

I AM directed by the Lieutenant-Governor to acknowledge the receipt of your letter dated the 5th ultimo, and in reply to thank the Association for the information furnished by them relative to the best means of improving the breed of Bengal cattle.

2. A copy of a letter, dated the 27th ultimo, from the Landholders' and Commercial Association, on the subject, and of the letter addressed by the Lieutenant-Governor to the Agricultural and Horticultural Society, is herewith forwarded for the information of the British Indian Association.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Secretary to the Landholders' and Commercial Association,—(No. 1306, dated the 14th March 1864.)

I AM directed by the Lieutenant-Governor to acknowledge the receipt of your letter dated the 27th ultimo, and in reply to thank the Association for the information furnished by them relative to the best means of improving the breed of Bengal cattle.

2. A copy of a letter, dated the 5th ultimo, from the British Indian Association on the subject, and of the letter addressed by the Lieutenant-Governor to the Agricultural and Horticultural Society, is herewith forwarded for the information of the Landholders' and Commercial Association.

From A. H. BLECHYNDEN, Esq., Secretary, Agricultural and Horticultural Society, to the Officiating Secretary to the Government of Bengal,—(dated the 29th March 1864.)

I HAVE now the honor to acknowledge the receipt of your letter of the 6th of October in reference to the breed of Bengal cattle, and, by direction of the Council, to enclose copy of the Report of the Committee appointed to consider and report on the subject. This Report was submitted by the Council and adopted at the last monthly General Meeting of the Society.

I am further instructed to enclose, as supplementary to the Report, copy of a Minute by Mr. John Starkartt, a Member of the Committee, embodying his own views on certain points in connection with the Report.

Report of the Special Committee in respect to the Cattle of Bengal.

YOUR Committee have taken into consideration the contents of a letter from the Government of Bengal on the subject of Native cattle which has been referred to them, and now beg to report as follows :—

2. The Government enquire—

First.—Whether any degeneracy in the breed of Bengal cattle has really occurred ;

Secondly.—If it be so, what may be the cause of it ; and,

Thirdly.—What means can be taken to remedy the evil by Government or by private associations and individuals.

3. In reply to the first point of enquiry your Committee conceive there can be no doubt but that degeneracy to some extent has taken place.

4. In respect to the second head various causes, your Committee are of opinion, may be assigned for this degeneracy, the chief of which are (1) the poorness of food and inadequacy of even the kinds supplied ; (2) the want of proper pasturage ground ; (3) over-work and being worked at too early an age ; (4) being allowed to breed too young ; (5) the scarcity of good bulls ; (6) stinting of the calves of milk.

5. With reference to the third point of enquiry your Committee have to submit the following suggestions towards remedying, in some measure, the evil complained of :—

In the first place it is very desirable that, as of late years, a scarcity of good bulls has arisen, proper bulls should be retained in each village like the Parish bulls in England, to be properly fed and stalled, so as to be available immediately they are required, as usually the allotted time is only one day. In the second place, to avoid the present system of stinting the calves of their milk, Zemindars should be requested to give yearly prizes for good cattle, each in his own Zemindaree, and every third year a general exhibition and competition for prizes should be held at the principal Stations or Collectorates.

In the third place it is advisable that the Government should be requested to instruct Collectors of Districts to induce Zemindars to allow a certain area in every village to be kept for pasturage purposes ; but as it cannot be expected that in the metropolitan Districts, such as Hooghly, Burdwan, and 24-Pergunnahs, where a beegah of potato, or sugarcane, or vegetable lands yields a rent of from Rupees 8 to 10 per beegah, Landholders will allot any large quantity of land for pasturage, your Committee would suggest that in these Districts annual fairs be held for the sale of imported cattle, and prizes be also distributed. The ground which formerly was set apart for this purpose has more recently been converted into arable land. In olden times but a trifling rent was paid for this description of land, but during recent years the rent has been enhanced, and it has been gradually absorbed into arable lands to meet the increased and increasing demand for food for an increasing population and for certain remunerative commercial staples.

Fourthly.—It would be desirable, if Government Officials would encourage Zemindars and others to establish Depôts in their respective Estates, to which should be attached plantations of sorgho

and such like nutritious fodder for their cattle, to be given with paddy straw when this article becomes scarce. Into these Depôts the best breeds of cattle, both exotic and indigenous, should be introduced. For milk purposes cross-breed with Europe stock is in a measure desirable ; but for draught purposes, and for the general requirements of the country, only Native bulls should be used, and these should be chosen distinctly for each breed according to the requirements of the District or country ; thus for instance (1) the large Up-country bull adapted for travelling over sandy soils ; (2) the fast walking bull, peculiar to the Gya District, an exceeding fine blood looking animal ; (3) a description of bull good either for cart or plough, such is to be found in various parts of Behar, viz. Dinapore, Patna, Buchowur, Kumaon, Mozufferpore, &c. ; (4) the Bengalee Brahminee bull exceedingly well fitted for working in paddy fields and for general use in Lower Bengal.

6. There are many other varieties of cattle well fitted for breeding purposes, of which your Committee cannot give a proper description without having the animals before them for proper classification, for even at the late Exhibition, with the exception of Gynas, there were no two bulls nor two pair of bullocks of the same breed. The great object is to bring to perfection the cattle each in its own peculiar District by affording the calf a fair share of milk and good pasture. All bulls retained for breeding purposes should, as calves, have the whole of the milk. The two Fairs of Sonapore and Seetamauree, in Tirhoot, have, it may be remarked, proved great sources of benefit to Planters and others, and therefore it would be very desirable were such instituted throughout the country.

7. Before concluding their Report your Committee would call attention to the fact that the subject of the present enquiry is not new to the Society. In the year 1835, when Lord William Bentinck was about to resign his Government of India, the Society were favored by him with a suggestion, recommending the introduction of the high-wheeled cart of Madras for general purposes of agriculture in Bengal. On this occasion the Society ordained that a Committee be selected out of the body of their Members, who should take the subject into their consideration and report on the feasibility of the advice thus proffered. The Report of the Committee is to be found in the second volume of transactions, but the valuable practical collateral information afforded in the letters of Major Parsons, Colonel Skinner, and Colonel Jenkins, touching the class and power of draught cattle in India, which accompanied the sentiments of the Committee, and on which the Report was based, were not printed with it. As bearing closely on the subject now before them, your Committee think the publication of these papers as an Appendix to this Report would be desirable. It will be seen from these documents that a series of experiments was instituted upwards of thirty years ago at Hissar "on a scale of considerable extent, and under the most judicious management, with the view of introducing the large Mysore cattle and crossing it with that of our own Provinces."

About four years after the period above referred to, namely in 1839, the Society instituted annual Cattle Shows, and continued them for the

space of five years, during which period the sum of Rupees 3,900 was expended for money prizes and for gold and silver medals to successful competitors. These shows were discontinued after the year 1844 on the report of the Cattle Committee, who considered "that the attempt to improve cattle and sheep by money premiums and medals has not held out sufficient encouragement in the number of cattle brought forward at the shows to induce a continuance of the annual Exhibitions." The great influx and settlement of Europeans in India during the last twenty years, combined with the greater spirit of activity which now prevails in all branches of commerce and trade, has made the India of 1864 very different from that of 1844; and that shows of the nature previously proposed are now likely to prove successful, and to encourage improvement in rural husbandry, we have an earnest in the active competition which was displayed in this Department of the Bengal Agricultural Exhibition recently held at Alipore.

In conclusion your Committee have to apologize for the delay which has taken place in the submission of this Report, which has been partly caused by the absence from Calcutta of more than one of its Members.

(Sd.) JOHN STALKARTT.
 " W. G. ROSE.
 " SUTTOSHURUN GHOSAL.
 " JOYKISSEN MOOKERJEE.

CALCUTTA,
 March 1864. }

I HAVE signed the above Report, but would go further in respect to that portion relative to the proposal that Collectors of Districts should request Zemindars to allow a certain area to be kept for pasturage purposes. My opinion is that the Legislature should take this up; it has the power to do so in the same way as it was necessary to obtain a law for enhancement of rent, evidently showing that the Zemindars are Tax Collectors, and can only do as the Legislature commands them; therefore the Legislature has the power. It is not perhaps known that the old laws and customs of renting lands to Ryots have been broken through, and the permanently settled Ryots have not their just rights. If a Ryot were permanently settled and residing in the village, if he had so much paddy land, he was not only entitled, but it was obligatory, that he should have so much dheer land, so many mango trees, so much grass land, and so much pasturage land. Just in the same way in which farms are leased in England, so much arable land, pasture land, and orchards, and the farmers are not permitted to break them up without the authority of the Landlord.

In reference to paragraph 6 I would beg to observe that by crossing the breed a very good bullock can be obtained, but a cross-bred bull is not a begetter of good stock, therefore the great object is to perfect the cattle each in its own District. That this is nothing new, I would beg to refer to the Poona and Poosah Studs, where they are obliged to import English and Arab stallions, and no cross-bred horse is ever used as a stallion.

(Sd.) JOHN STALKARTT.

From COLONEL H. W. NORMAN, C. R., Secretary to the Government of India, Military Department, to the Secretary to the Government of Bengal,—(No. 612, dated the 16th March 1864.)

I AM directed to transmit to you, for the information of the Hon'ble the Lieutenant-Governor, a copy of the Report of the Commissariat Commission, and of a letter to the Adjutant-General No. 741, dated 23rd February 1864, containing the decisions of Government on the recommendations of the

From: Officiating Commissary General, Commission, and No. 3136 dated 27th November 1863, with also copies of the 249, correspondence annexures. To Commissary General, No. 745, dated 23rd February 1864, paragraphs 5 to 7, which contain the views and suggestions of the 4585 dated 347, Officiating Commissary General relative to the questions referred to in paragraphs 15 to 18 of that letter, and in paragraphs 206, 207, and 277 of the Report.

2. From these papers His Honor will see that it appears to the Government of India, in the Military Department, that the local Governments can best judge what measures should be taken to improve the breed of cattle in the different Provinces, excepting the few which can be carried out in connection with the Hissar Cattle Farm; and the Governor General in Council concurs in the opinion of the Officiating Commissary General that the Civil Officers of Districts can best advise the local Governments as to the nature and extent of the encouragements which should be offered to the cultivators in the neighbourhood of the Cantonments in which European Troops are located to induce them to grow such vegetables as the Troops prefer, although their Reports should be framed after free communication with the Executive Commissariat Officers.

3. I am to request that Government may be favored with His Honor's opinion as to the expediency of obtaining bulls from the Hissar Farm, as suggested by Colonel Scott, and as to the numbers which would be required, and the localities in which they should be placed.

4. His Honor's opinion is further solicited as to the necessity for any encouragement being given, or any stimulus being applied, to the breeding of cattle and the cultivation of vegetables in addition to those offered by the cattle and vegetable fairs and shows which have already been so successfully commenced. The Governor General in Council observes that any extensive direct encouragement must be attended with very considerable expense; and His Honor may possibly consider that the prizes offered at the fairs, and still more the interest periodically excited by the latter, render unnecessary any additional encouragement, excepting perhaps some of the special rewards recommended by the Commissariat Commission in paragraph 206 of their Report.

5. The Governor General in Council will be glad of an early expression of the Lieutenant-Governor's views on these points after careful consideration; and should His Honor consider that additional encouragement may with real advantage be given, I am to request that its nature, the localities in which it should be offered, and the estimated annual cost may be stated for the consideration of the Government of India.

6. In the meantime an application will be made to the Right Hon'ble the Secretary of State for the ten improved Leicester rams and ten ewes for the Hissar Farm; and the Commissary General will be informed that Government will favorably consider any recommendations he may make for the renewal or special acceptance of the contracts of men who may have supplied the Troops unusually well.

Extract from a letter from COLONEL H. W. NORMAN, C. B., Secretary to the Government of India, Military Department, to the Adjutant-General,—(No. 741, dated the 23rd February 1864.)

* * * * *

13. Referring now to Clause VIII. of paragraph 6 above, I am to acquaint you, for His Excellency's information, that Contractors will be required by all future contracts to supply the cattle and sheep with abundance of water; to increase the quantity of bhoosa from 5 and 1½ seers respectively to 7 seers a day to each head of cattle, and 2 seers a day to each sheep (other fodder being increased in the same proportion when given instead of bhoosa) whenever the grazing is scanty, or the grass watery and deficient in nutriment; and to keep large lumps of rock salt in every cattle-yard and pasture. This will be in addition to the quantity of salt which is now given to the animals in their food, the mixture of the powdered salt with the bhoosa, though very necessary, being no sufficient guarantee that each receives it regularly and in sufficient quantity.

Measures for improving the quality of the meat.

Fodder, water, and salt.

Report paragraph 286.

14. I am further to state that inquiries are now in progress as to the possibility of requiring Contractors to secure proper grazing grounds in the neighbourhood of the Stations which they have to supply, and of affording them facilities of renting such grounds on moderate terms.

Contractors' grazing grounds.

15. The fairs, cattle shows, and prizes for cattle, recommended in paragraph 277 of the Report, have already been commenced by the various Local Governments with marked success; and it does not appear necessary to do anything more than encourage the endeavors of the Commissary General, whose attention has been already drawn to the subject, to improve the breed of sheep by the gradual importation of English rams, two of which have recently been purchased here for crossing with ewes to be selected for the purpose by the Superintendent of the Hissar Cattle Farm. Lieutenant-Colonel Scott's views on this subject are already before the Commander-in-Chief in the letter copy of which was transmitted for His Excellency's information with one from this Office No. 724, dated 25th January 1864. The proposals in that letter will be further considered by Government hereafter.

Improvement of the breed of cattle.

16. With respect to the supply of vegetables, the Governor General in Council considers that convict labor in the Jails may be usefully and unobjectionably applied, and it has the advantage of the supervision of European Officers, who can

Supply of Vegetables.

Report paragraphs 190-192.

bring their special knowledge to bear on the subject as regards mode of culture, the time of planting and sowing, the best kinds of seed, &c., &c. The Commissary General will therefore be instructed to arrange, if possible, for the purchase of such supplies of vegetables as the Jails can guarantee to furnish, in so far as it can be done without injustice to Contractors or risk of failure in the supply.

17. His Excellency in Council considers the suggestion in paragraph 219 of the Report, that encouragement should be given to cultivate vegetables of those descriptions only of which the Soldiers approve, a judicious one; and the Commissary General will be desired to cause a list of such vegetables to be drawn out in communication with the Adjutant-General's Department.

18. He will also be instructed to submit, with as little delay as possible, distinct proposals for the encouragement to be given to cultivators in accordance with the general recommendations of the Commission in paragraph 206 of the Report, which are fully approved by Government. It may, however, not be out of place to remark that the increased demand for vegetables has already produced, and may be expected to continue to produce, a steadily increasing supply; and some statements recently forwarded for His Excellency's information will have shown the Commander-in-Chief that, in spite of many difficulties, considerable progress has been made in extending the periods during which potatoes can be issued to the Troops. The Commissary General is well aware of the importance, which Government attaches to the efforts of the Department in this direction, and its endeavors will not be allowed to slacken.

Best means of encouraging the cultivation.

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From LIEUTENANT-COLONEL J. C. SCOTT, Officiating Commissary General, to the Officiating Secretary to the Government of India, Military Department,—(No. 3110, dated Fort William, the 27th November 1863.)

With reference to your docket No. 532 of the 6th May last, and its annexure, Adjutant-General's letter No 207 of the 23rd April, on the alleged probability of a failure in the supply of the beef and mutton ration to the British Soldier in India, I have the honor to append a summary of the correspondence that has passed departmentally on the subject, and to state that in my opinion no apprehensions need be entertained of the supply of horned cattle falling short of the demand.

2. The European Troops of the Bengal Presidency are distributed over a vast territory, extending from Peshawur in the north to Calcutta in the south, from Jubbulpore in the west to Dacca in the east. The number of cattle required for their annual consumption may be stated in round numbers at 1,00,000, which, taking the wide area over which the demand is spread, should trench but lightly on the resources of the country, seeing that for the consumption of Calcutta and Suburbs alone nearly 80,000 head of cattle are annually slaughtered. With these facts before me, it appears that any fear of a failure in the supply is groundless.

3. There can be no doubt that a considerable decrease in the stock of cattle in the North-Western Provinces has been caused by the famine

of 1861 and its consequences; but in two or three years the void will be filled up, and as Railways extend, the supply will be more equally distributed, Districts having a superabundance forwarding their superfluity to localities where there may be a deficiency.

4. While I have no fears of a failure in the supply, I think much might be done to improve the stock, and I would recommend good bulls from the Hissar Farm being selected and stationed in the most favorable localities for gratuitous service, some encouragement being at the same time held out in the shape of prizes for the best produce, which would doubtless have a beneficial effect.

5. With regard to the suggestion of His Excellency the Commander-in-Chief, that cattle to improve the breed be imported from Australia, I beg to say such a measure does not, to me, appear advisable.

6. The Australian oxen are tall, loose made, clumsy animals, not half so well fitted for draught purposes as the Hissar bullock, and quite unsuited for agricultural purposes in this country. Indeed, they require so much fodder that no native would accept of them; their flesh too is exceedingly coarse, and to keep them even in tolerable condition would be very expensive; added to which, they are subject to a most contagious and fatal disease, pleura pneumonia, which lies latent in the system till developed by certain states of the atmosphere, when it breaks out and sweeps herd after herd off the face of the country: the risk of introducing this terrible scourge into India would of itself be a bar to the importation of cattle that are subject to it.

7. With respect to the stock of sheep, I regret I do not take so favorable a view, being satisfied that it is not at present equal to the drain on it, and that remedial measures are of pressing necessity. I recommend that the issue of mutton to the Troops be restricted to once a week, or during the four cold months its issue might be altogether discontinued, corresponding additional issues being made in the hot weather and rains, when a change of food is more acceptable, and more required to stimulate the languid appetite. I would further recommend that in future Contract Deeds a stipulation should be inserted that not more than one-third of the mutton tendered for rations should be ewe mutton; this, while it would enable stock breeders to get rid of barren or superfluous females, would be a check to the wholesale slaughter of them that takes place at present.

8. As with the horned cattle, so with the sheep, much might be done to improve the breed. I would for this purpose suggest the importation of selected Leicester or Southdown rams from England; some of them might be kept at Hissar to cross with the large breeds of sheep found to the westward in Rajpootana and in the neighbourhood of Lahore, some of them might be stationed with advantage in Huzara, or at the skirt of the hills in the Punjab; but for this locality the Cheviot would be perhaps the best breed,—the produce from both places being distributed, and prizes offered for the best specimens at agricultural shows, which I hope in time to see established at all the large Stations. I would further advocate the grant on long leases, at nominal rents, of suitable tracts of waste land on condition of their being stocked with sheep, restrictions being imposed as to the number to be borne on the

grant, and mode of disposing of the surplus produce. While on this subject, I may mention that I believe the prospectus of a "Farming Company" to be established at Mussoorie for breeding cattle, sheep, pigs, &c., will shortly appear, and it would be better to stimulate such undertakings by giving them encouragement and support than for Government itself to undertake farming operations.

9. Much stress has been laid on the rise that has taken place in the price of meat as indicating an approaching scarcity, but a rise has taken place in the price of almost every article of consumption, and in labor also. I believe myself that while the increased demand has doubtless had its natural effect, that as regards the ration of the Soldier, the much higher standard now insisted on, the difficulty of obtaining grass-fed meat equal to that standard, and the risk and penalties to which contractors are subjected by rejections, have had as much to do with raising the price of the meat portion of it as all other causes combined.

Abstract of letters of Deputy Commissaries General and Executive Commissariat Officers.

PESHAWUR.

Letter No. 156 of 7th July 1863, from the Peshawur Executive, states that there is no difficulty whatever in the supply of beef ration, and that the sheep are mostly procured from the neighbourhood of Mooltan.

RAWUL PINDEE.

The Executive Commissariat Officer at Rawul Pindie, in his No. 114 of 4th July 1863, ascribes the present rise in the price of horned cattle in that part of the Punjab not to a reduction in the stock of the country, but to an increased drainage on its resources from other quarters. He notices the fact, however, of not having ever seen "a hill cow in the slaughter yard."

In regard to sheep the fact of "a serious decrease" in stock is admitted, and it is attributed "to the increased demand, and in a measure to the famine." But he is nevertheless of opinion that it is unnecessary to restrict the issue of mutton to once a week.

He advocates the plan of crossing the Pind-Dadun-Khan sheep with English stock, and recommends the importation of English rams for the purpose. It is remarked that during the hot weather they may be retained in the hills, and kept in the plains from the 15th of October to the 15th of April. By this arrangement, he observes, they "would thrive as well as they do at home."

SEALKOTE.

Captain Davidson, Executive Commissariat Officer at Sealkote, admits, in his letter No. 97 of 23rd June 1863, the fact of a decrease in the stock of cattle, but he considers this decrease to be of a temporary nature, and the result of the late famine in the North-West. He believes "that there is not the least fear" of a failure in the supply of beef, and is of opinion that "after a few seasons of average productiveness there will be, as heretofore, a large surplus of horned cattle, which will gradually increase from year to year, and, it is to be hoped, tend to reduce the price of beef to the rate current before the famine." The fact of the decrease of the

country having been found equal to meet the wants of a very large body of European Troops during the years of the mutiny forms the basis of Captain Davidson's opinion that in ordinary times no difficulty will be experienced in the matter of the supply of beef rations when the strength is so much reduced.

In regard to sheep, Captain Davidson is of opinion that the perceptible decrease in the stock is principally owing to the "indiscriminate slaughter of ewe mutton." But in the Punjab the decrease is said to be not so marked as in the Central and North-West Provinces owing to the superior size of the sheep. In the Punjab the average weight of a sheep, when killed, is stated to be from 28 to 55 lbs. each, whilst in other parts of the country it varies from 18 to 25 lbs.

With a view to check further decrease in the stock of sheep, as well as to improve the resources of the country in these respects permanently, Captain Davidson offers the following suggestions :—

- 1st.—To prohibit the slaughter of brood stock.
- 2nd.—The establishment of breeding farms.
- 3rd.—The setting apart of grazing lands in every division wherever practicable, allowing the male produce of the breeding farms to grow and fatten on the pasture thereof, and thus be prepared for the slaughter.

In localities where good pasture is not procurable all the year round, or obtainable only for a portion thereof, Captain Davidson proposes that the sheep be fed on gram at those Stations for the space of three months before being slaughtered, and in the following scale :—

- | | |
|---|-------------|
| 1st month $\frac{1}{4}$ of a seer each | } per diem. |
| 2nd and 3rd months $\frac{1}{4}$ of a seer each | |

He anticipates good results from the establishment of breeding farms from the alleged success of the experiment in Pegu some time ago, and forms his scheme of grazing lands from the fact of the grass-fed mutton of Huzara and other Districts abounding in rich pasture, nearly equaling in quality the gram-fed mutton of other places not possessing such natural advantages. The report winds up with a proposal that, so long as a change for the better is not observable in the stock of sheep from the introduction of measures that may be decided on by authority, the issue of mutton ration may be limited to once a week for six months of the year, the hot season excepted. But this remark is confined to Divisions where the stock has been materially decreased.

LAHORE.

The Executive Commissariat Officer at Meeran Meer, in his No. 124 of 2nd July last, states that, from the enquiries instituted by him, it appears that there has been "no great deterioration in the supply of cattle," but that the stock of sheep has decreased considerably. The result is ascribed to increased consumption and the present high standard to which the quality of the mutton ration has been raised. He adds that the Regimental Authorities enforce the provision of such a superior description of mutton that nothing but gram-fed mutton will come up to the mark, and that the best grass-fed mutton will not suffice for the purpose; and accordingly, urges the importance of feeding the sheep which may be used for slaughter purposes on gram, a measure which will doubtless entail additional expense on

the State, but without which, he thinks, there will be no "end to complaints."

MOOLTAN.

In letter No. 50 of 14th July 1863, the Executive Commissariat Officer at Mooltan states that in the Stations marginally noted there has been no material diminution in the stock of cattle, but that the decrease in the Division "would appear to be very small." This reduction in stock, he says, was caused by the exportation of the animals to other Districts where the demand was said to be great during the preceding year. In the present season, owing to the comparative abundance of fodder, there is an "unwillingness" on the part of the owners to sell their cattle, which would necessarily lead to an enhancement in the price of meat.

Sub-Assistant Commissary General Captain Hogg's experience leads him to conclude that the quality of the beef and mutton ration at Mooltan is superior to that served out at any other Station.

With Memorandum No. 58 of 24th July 1863, Captain Hogg forwards copies of letters from the Commissioners of Mooltan and Dera-Ismail-Khan bearing on the subject under notice, the contents of which may be summed up as follows :—

The Commissioner of Mooltan, in letter No. 145 of 23rd July last, to the address of the local Executive Commissariat Officer, states that there has been a decrease in the stock of horned cattle between the years 1862-63 and 1863-64 to the extent of nearly six per cent. But during that period and the two official years immediately preceding the increase of sheep was at the rate of 11 and 1 per cent. respectively. In the Bhawalpore Territory "there has been a falling off in the number of sheep and horned cattle" during the past year, resulting both from sale and casualties. I gather from the statistics embodied in the Report of the Commissioner that in the District of Mooltan there has been "a decrease of 14,045 cows" compared with the stock of the previous year. In the words of the Commissioner, "it does not seem whether the decrease has been caused by death or removal to other parts of the country." Presuming that the term "death" as used by that functionary signifies casualties, the legitimate inference would be that the reduction is not attributable to greater consumption.

In bringing the Report to a close the Commissioner expresses his confidence that "the ample pasture afforded by the rains of 1862 and the present excellent rains ought to restore stock where a want of rain has caused its diminution."

The Commissioner and Superintendent, Derajat Division, in a letter No. 103 of 1st July 1862, to the President of the late Commissariat Commission, expresses himself to the following effect :—

The fact of a diminution in the stock of horned cattle was admitted by all the Deputy Commissioners in the Division; but the Commissioner attributed it to the drought with which the country was visited during the last three years, which considerably affected the price of grain. The prevalence of a murrain "in the Cis-Indus tracts" for the last two years also proved injurious. In the opinion of the above functionary

the decrease in the stock was not much attributable to "increased consumption of meat."

FEROZEPOR.

The Executive Commissariat Officer at Ferozepore, in his letter No. 132 of 4th June 1863, states "that there is no doubt but that the stock of slaughter cattle and sheep are on the decrease." The remark is made especially applicable to the latter. He is of opinion, however, that there has been no deterioration in quality, but that on the contrary the standard of meat ration has been raised so much so "that the Military Authorities now expect to get meat of a far better quality than can be procured from grass-fed cattle."

Sub-Assistant Commissary General Captain Taylor attributes this decrease in stock to increased consumption of meat consequent on the large influx of European Troops into the country since the year of the mutiny, as also the occurrence of the late famine in the North-West Provinces. The famine affected the stock in two ways,—

Firstly, the prevalence of casualties amongst the cattle owing to the want of food; and *secondly*, by the increased consumption of meat even amongst the natives themselves owing to the scarcity of grain. He remarks, however, that "all this would easily be overcome but for the baneful custom of the country of killing cows and ewes, to prevent which some stringent measures are required; and unless Government take upon themselves to put a stop to this practice, I have no doubt but that difficulty will be experienced some years hence in procuring a ready and abundant supply of meat." He is of opinion that the adoption of this measure is all that is required, and that there is not the least necessity for the establishment of breeding farms on the part of the Government, which involves considerable expense.

In regard to the remark of His Excellency the Commander-in-Chief as to the difficulty experienced by private individuals in procuring good mutton, Captain Taylor alludes to the "universal custom" which existed before the mutinies of Officers obtaining "their mutton from either the Regimental Messes or Station Clubs which kept up a regular flock of sheep and fed them on gram and bhoosah, and which used to cost about 2 Rupees a quarter;" and he is positive that similar results might yet be attained under "proper management," but for the existing practice of Officers resorting largely to the bazar, expecting to "get good mutton (although the original cost of sheep has increased) for from 6 to 8 annas a quarter, which even in former days was impossible, for those few who resorted to the bazar and expected good mutton never paid less than a Rupee a quarter." This remark is made equally applicable to beef. Captain Taylor goes on to say that those accustomed to good food from their infancy must agree to pay "proper price" if they would wish to live equally well in this country as in England. As regards the European Troops, however, he is of opinion that they are provided with the same sort of rations in India, if not better, as "in any of the Colonies," and corroborates his statement by averring that he has "heard many Soldiers say that they prefer the rations they get out here to what they got even at home."

JULLUNDUR.

The Executive Commissariat Officer at Jullundur, in letter No. 98 of 15th June last, states that from the enquiries instituted by him he is led to believe that the stock of horned cattle has not diminished, and that in his opinion there is no fear of failure in the supply. The belief of the Executive Officer, however, seems to have been formed independently of the information furnished by "the contractors and other butchers," who represented that "the cattle are procured with some trouble, as the owners, being mostly Hindoos, will not readily sell them, and there appear to be no regular cattle marts in this part of the country." In regard to the deterioration of the stock, he is of opinion that the quality of the beef ration is not only "very good" but has improved lately.

Captain Holland, however, does not take the same view in respect to mutton, and is under the impression that the increased demand for the articles has tended to a material diminution in the stock of sheep. He remarks that the difficulty of the Commissariat Contractor is proportionally greater than that of "messes and private individuals" in consequence of the greater demand for the Troops. He ascribes this falling off in the stock to the "greater influx of Europeans into the country since 1857," and recommends the issue of mutton "only once a week during certain portions of the year."

KUSSOWLIE.

In letter No. 138, dated the 17th June 1863, the Executive Commissariat Officer at Kussowlie expresses his opinion to the effect that "no dangerous decrease" has taken place either in the stock, or any deterioration in the quality of the cattle which furnish the beef ration of the British Soldier, but that on the other hand he is satisfied that there has been a perceptible diminution in the stock of sheep, and recommends the adoption of "energetic measures" tending "to give a stimulus to the breeding of sheep." He is further of opinion that the standard of mutton ration has lately been raised so high that it cannot properly be styled "best grass-fed," and presumes that almost every Contractor who undertakes the supply "now feeds his sheep for Hospital issue on gram" with a view to obviate condemnations and fines consequent thereon.

Major Mills represents the desirability of inviting separate Tenders for beef and mutton in supersession of the existing practice of employing the same Contractor in supplying both the articles. Such a measure, he thinks, will result in inducing a new class of men to undertake the duty of providing the European Troops with mutton ration possessed of the means of effecting direct arrangements with the breeders themselves, "who at present object to have any dealings with men who slaughter beef," and suggests that the restriction to the bi-weekly supply of mutton be deferred pending the result of the trial. He recommends that the experiment be made in one of two Divisions possessing local advantages in regard to the breeding of sheep.

UMBALLA.

The Executive Commissariat Officer at Umballa in letter No. 173 of 9th July 1863, to the address of the Deputy Commissary General, Upper Circle ignores the existence of any present difficulty in the supply of meat rations of either description

nor does he anticipate any at a future period. In support of his statement he quotes the following remark from the Assistant Commissioner at that Station:—"There is no decrease in the stock of cattle attributable to the demand for slaughter cattle, and that the agricultural prospects of this Division are not likely to be affected thereby. There appears no reason to suppose that the quality of cattle or sheep in this Division has deteriorated." The Executive Commissariat Officer goes on to say that consequent on the standard of rations having been improved "of late years," both the "Officers and men have been led to expect meat of a superior quality to the best grass-fed." He makes his remark, however, especially applicable to mutton, and avers that it is not unfrequently condemned, simply on the ground of its being "thin," though it may be pronounced "quite sweet and good." In winding up his report Captain Mylne urges the necessity of fixing a standard of meat rations to test the quality of the supplies generally.

The reports of the several Executive Commissariat Officers in the Upper Circle are followed up by an elaborate report on the subject by Lieutenant-Colonel Reddie, Deputy Commissary General of that Circle, which I shall endeavor to summarise in a few words.

A reduction in the stock of horned cattle is ignored in unqualified terms, and the present enhanced rate of beef is attributed to a rise in the standard quality of that article of Soldiers' rations, as also to the greater risks of loss a Contractor is liable to from rejections, whether just or fastidious. By a reference to the statistics published in the Calcutta Custom House Returns and the Exchange Prices Current, Colonel Reddie endeavors to show that the slaughter cattle in the Commissariat Department is only one-fiftieth part of the expenditure incurred on account of agricultural, mercantile, and domestic purposes, the average annual export of hides being fifty lacs, and the consumption of beef for Soldiers' rations one lac cattle. He not only differs in opinion from Captain Taylor, the Executive Commissariat Officer at Ferozepore, that the slaughter of cows has a great share in reducing the stock of horned cattle, but is decidedly of opinion that the discontinuance of the practice will tell heavily on the agricultural and other interests of the country dependent on the multiplication of the male stock, which will doubtless have to meet all wants connected with the supply of meat rations in the event of such a rule being passed by the Government. In support of his argument he alludes to the comparative coarseness of the beef derived from the ox and to the circumstance of weedy animals or barren cows only being killed for the purposes.

Colonel Reddie also differs from the general opinion that there has been a decrease in the stock of sheep, and refutes the statement of Captain Davidson, Executive Commissariat Officer at Sealkota, by stating that the establishment of breeding farms in Upper Pegu proved a complete failure; but he is of opinion, however, that the experiment, if tried in this country, may result in greater success on account of the congeniality of its climate to sheep compared with that of Upper Pegu. He does not, however, enter into the question as to whether such breeding farms should be established by Government or left to private enterprise. In regard to Captain Davidson's

remark that the large consumption of ewes has had a great influence in reducing the stock of sheep, Colonel Reddie points to the number of barren ewes killed, and also enters into a little detail to show the incorrectness of the view taken by Captain Davidson, that the increase in the stock does not equal the demand, and is not likely to do so for some time to come. The Deputy Commissary General, Upper Circle, coincides in the expediency of restricting the issue of mutton to once a week generally, making an exception in the case of the Stations in the Punjab, where, he says, the gradual development of the trade in wool, which is beginning to assume a prosperous condition, will give an additional impetus to the breeding of sheep, and thus indirectly serve the purposes of the Army in the matter of the supply of mutton rations.

DELHI.

It appears, from copy of a letter from the Commissioner of Delhi, attached to letter No. 150 of 9th September 1863, of the local Executive, that that Officer considers the decrease in the stock of cattle caused by the late famine to be of a temporary character, and that it will rise to its wonted level without any interference on the part of the Government, which, he thinks, will produce evil, instead of good effects. The Executive Commissariat Officer does not apprehend any failure in the provision of beef; but with a view to improve its quality, as well as the size of the animals, advocates the distribution of English, Australian, or even good Hansi or Scinde bulls at the different Stations in the District. The decrease in the stock of sheep is admitted, and Sub-Assistant Commissary General Captain Newmarch submits the desirability of re-placing mutton by goat's flesh for a period of two or three years, and this temporary arrangement will, in his opinion, contribute to the equalization of the supply of sheep to the extent of present demands.

MEERUT.

The contents of the letters of the Executive Commissariat Officer at Meerut, Nos. 115 and 180 of 14th July and 18th August last respectively, and of their annexures, may be summed up as follows:—

The fact of a serious diminution in the stock both of horned cattle and sheep since the year 1856 is universally admitted; the natives, Civil Authorities, and the local Executive Commissariat Officer all agree in this respect. The mutiny, increased strength of European Troops, the draught in the North-West accompanied by a terrible famine, and the pestilence which broke out during the year 1860-61, are mentioned as amongst the causes of this unhappy result. In a report made on the subject by the Collector of Meerut the establishment of breeding and grazing farms of sheep under the control of Stud Officers is recommended. Hansi and Hissar and the slopes of the Himalayahs are pointed out as amongst the most advantageous places where, it is said, the experiments can be tried with every prospect of a splendid success. The holding out of encouragements on the part of Government to private enterprise in this respect is also recommended.

As a remedy for the evils complained of, Major Christopher, Assistant Commissary General, makes the following proposals:—

1st.—The extension of meat contracts on fair and liberal terms for such long periods as would induce men of capital and substance to undertake the contracts, and to adopt measures for the breeding of cattle on an extensive scale, with a view to the fulfilment of their engagements.

2ndly.—That inducements be held out to cattle breeders in the shape of distribution of prizes at annual shows to be held at Sudder Stations amongst the successful competitors.

BAREILLY.

In his Report No. 300 of 6th October 1863, Major Willes, Assistant Commissary General, in charge of the Bareilly Executive, expresses himself very confidently as to the fact of an actual decrease in the stock, both of kind and sheep. Whilst attributing this decrease primarily to the mutiny and the late famine, he is clearly of opinion that the slaughter of cows and ewes has not had a little to do in the matter, and recommends that only barren cows and oxen, as well as wethers, be allowed to be killed to meet the wants of the Army, at least for some time to come, with a view to the restoration of the supply to the level of the demand; moreover the establishment of breeding farms in localities suited to the purpose is recommended. Major Willes confidently expresses that unless the proposals made by him are carried out at once the apprehension of His Excellency the Commander-in-Chief in the matter of a failure in the supply of meat rations to the European soldiery will be realized.

AGRA.

The Executive Commissariat Officer at Agra, in his letter No. 303 of 23rd September last, states that though at present the resources of the Division are fully equal to the demands of beef, yet that unless ox beef is substituted for cow beef to a certain extent, the slaughter of cows in such large numbers will, in all probability, endanger the supply of beef rations at some future period. In regard to sheep the fact of a great decrease in stock is admitted, and the absolute prohibition of the slaughter of ewes and the establishment of breeding farms on the part of the Government are suggested as the means of remedying the evil.

GWALIOR.

Deputy Assistant Commissary General Captain Lowe, Executive Commissariat Officer at Gwalior, in his No. 244 of 26th June 1863, states that, from the information collected by him, he is "led to believe that two years more will suffice to see the stock of sheep exhausted." The deterioration of the horned cattle procurable in the Province is acknowledged in plain terms, and I further infer from the general tenor of the remarks made that the stock has decreased. The remedy proposed is the establishing of breeding farms.

CAWNPORE.

The Executive Commissariat Officer at Cawnpore, in his letter No. 323 of 7th October 1863, states that the stock of horned cattle has not fallen off, but that of sheep has to a very considerable extent. I find, however, on reference to copy of letter No 231 of 22nd September 1863, from the Officiating Magistrate and Collector of Furruckabad that that Officer holds the very reverse opinion. To prevent any difficulty in the supply of mutton, the Executive Commissariat Officer recommends that its issue be restricted to once a week.

LUCKNOW.

On a reference to letter No. 216 of 24th July last, from the Executive Commissariat Officer, Lucknow, to the address of the Deputy Commissary General, Central Circle, I find that the Deputy Commissioners of Lucknow, Seetapore, Lukeempore, and Hurdul generally agree in asserting that there has been no sensible decrease in the stock either of horned cattle or sheep, though the latter are not so plentiful as the former. The Executive Commissariat Officer does not fear a failure in the supply of beef, but is of opinion that the stock of sheep has not only deteriorated in quality, but has also been reduced owing to the influx of large bodies of European Troops into the country since the year of the mutiny, as well as the indiscriminate slaughter of ewes. A remedy, not only to stave off the deterioration of the animals, but to improve the breed of the country, Assistant Commissary General Captain Chalmers suggests the advisability of annually importing into India the rams and ewes of the large good breeds of England and Australia, and offering every possible encouragement to native breeders with a view to the attainment of the object.

FYZABAD.

It appears from the annexures of letter No. 114 of 9th July last, from the Executive Commissariat Officer of Fyzabad, that the Deputy Commissioners of Fyzabad and Ray Bareilly do not entertain any apprehensions of a failure of beef rations, but the fact of a decrease in the stock of sheep is admitted by both. The former Officer urges in strong language the necessity of making the slaughter of ewes punishable by law, which he is certain will restore an equilibrium between the supply and the demand. The Officiating Deputy Commissioner of Gondah asserts that the stock of slaughter cattle must naturally be reduced owing to an increase in the demand, and suggests that liberal rates must be allowed for meat rations as an inducement to European settlers to take up the supply. He also thinks that with the large tracts of waste lands at the disposal of Government they ought to establish breeding farms of horned cattle and sheep to meet the wants of the Troops.

SAUGOR.

Assistant Commissary General Major Macbean, Executive Commissariat Officer at Saugor, in his letter No. 133 of 8th June, states that the increase of European Troops in this country has sensibly affected the stock of cattle and sheep, and in corroboration of his statement alludes to the enhanced rates of the prices of the animals at the present time, which, according to his showing, have increased 100 per cent. The resources of the Districts of Saugor, Jubbulpore, and Nowgong, he asserts, are equal to local consumption, but in consequence of the Contractors of the Gwalior, Cawnpore, and Allahabad Executives resorting largely to those Districts to meet their demands, the Contractors of the Saugor Division are compelled to draw their supplies from other markets. The present stock of sheep was procured from the Territories on the south of the Nerbudda at the rate of Rupees 50 per score: the breed is large, and some of the animals weigh 30lbs. when dressed.

Major Macbean attributes the present reduced state of the stock of horned cattle and sheep to the prevailing custom of killing cows and ewes, and he is clearly of opinion that, unless this practice is discontinued, the future supply of meat rations to

the British Soldier in India will be a "source of great anxiety." He fully concurs in the expediency of establishing experimental breeding farms of sheep as suggested by His Excellency the Commander-in-Chief, and fully believes that they "will be absolutely necessary in a few years."

ALLAHABAD.

The Executive Commissariat Officer at Allahabad, Assistant Commissary General Major Macpherson, in his letter No. 143 of 4th July 1863, admits the fact of a great decrease in the stock of sheep, which, in his opinion, has resulted both from increased consumption of mutton, as well as the slaughter of ewes. He avers that Elahie Buksh, the Meat Contractor, "begged not to be bound down to supply mutton even once a week."

BENARES.

Deputy Assistant Commissary General Captain Mackenzie, Executive Commissariat Officer at Benares, in his letter No. 149 of 23rd May 1863, apprehends no difficulty either in the supply of horned cattle or sheep consequent on the extension of the line of rail. He states that "good horned cattle" are always available, and that though there is no falling off in the number of sheep the condition in which they are obtainable is not such as to render them fit for consumption without being fed on gram for some time.

DINAPORE.

In letter No. 185 of 30th May 1863, the Executive Commissariat Officer at Dinapore anticipates "total exhaustion of the supply in this country of slaughter cattle (both horned cattle and sheep) if matters are allowed to go on as they now are. The good condition and quality of the sheep at Dinapore he attributes to the fact of the surrounding Districts being famous for their breed of sheep. The establishment of breeding farms on the part of the Government, both for horned cattle and sheep is recommended by him, more with a view to encourage private enterprise than with the object of holding in its hands the supply of meat rations as a permanent arrangement. He suggests the importation of good bulls from England, and Merino rams from Spain for breeding purposes.

DARJEELING.

Sub-Assistant Commissary General Captain Thomson, in charge of the Darjeeling Executive, (in letter No. 81 of 27th May 1863,) feels himself not quite competent to pass an opinion on the subject owing to the shortness of his experience. He entertains, however, no fears as to a failure in the supply of horned cattle, but thinks it would be advisable to restrict the issue of mutton to once a week, the stock of sheep in the country not being sufficient to meet the extent of existing demands.

BARRACKPORE.

In letter No. 83 of 4th July 1863, Captain Sykes, the Executive Commissariat Officer at Barrackpore, not only ignores the fact of a diminution in the stock of horned cattle, but on the contrary is of opinion that the supply is on a par with the demand. As regards sheep, he states that they are not bred largely in Bengal, and have to be brought from a distance, which involves expense and trouble, and hence he believes difficulty arises in the supply of mutton. He is opposed to the plan of setting up breeding farms.

PRESIDENCY.

The Executive Commissariat Officer at the Presidency, in his letter No. 170 of 23rd May

1863, states that there has been "no deterioration or decrease in the stock of horned cattle, the supply is quite equal to the demand," but he says that, as respects sheep the stock has not only decreased but "is rapidly decreasing."

DACCA.

Sub-Assistant Commissary General Captain Lane, the Executive Commissariat Officer at Dacca, in the Report furnished with his letter No. 189 of 26th June 1863, expresses his belief that the stock of horned cattle in Eastern Bengal equals the demand for ration purposes, and that this equality will be preserved even if consumption be increased. In regard to sheep he avers the stock is not so plentiful; nevertheless he states that he can arrange for the issue of mutton twice a week to the European Troops instead of once a week, as is the case at present in that Division.

Major FitzGerald, Deputy Commissary General, Lower Circle, in his letter No. 762 of 4th September 1863, after giving a short analysis of the Reports of Executive Commissariat Officers in his Circle, ignores the fact of a reduction in the stock of horned cattle in the country; nor does he anticipate any difficulty in the prospect of their supply hereafter. He holds the very reverse opinion, however, respecting the sheep, and suggests, by way of remedy, that every encouragement be afforded on the part of the Government towards the introduction of British capital in the shape of "grants of grazing lands on the most easy terms, prescribing only conditions for the maintenance of a certain brood stock"; and also advocates the establishment of one or two experimental farms on a very moderate scale, with the object of demonstrating the remunerativeness of the speculation, as well as of drawing public attention to the matter.

The infusion of fresh blood from Europe and the Colonies is further recommended by Major FitzGerald to raise the quality of mutton ration. He also draws attention to the fact that "as a large consumer," the Government may, with advantage, discourage the existing practice of killing ewes by ruling that none but wether mutton should be accepted by the Commissariat Department.

(Sd.) J. C. SCOTT, *Lieut.-Col.,*
Officiating Commissary General.

Extract of a letter from COLONEL H. W. NORMAN, C. B., Secretary to the Government of India, Military Department, to the Officiating Commissary General,—(No. 746, dated Fort William, the 23rd February 1864.)

PARA. 5.—Referring to paragraph 14 of the letter to the Adjutant-General, and to the allusion therein to the letter to your address, No. 611, dated 20th January 1864, I am to request that you will submit, for the consideration of Government, a distinct proposal for carrying out such of the recommendations offered in your letter No. 249, dated 27th November 1863, as you may consider it necessary to adopt, stating the number of bulls which should be employed as recommended in paragraph 4 of your letter, and the places at which they should be stationed, and also the numbers of each description of ram which should be imported, and the localities to which they should be respectively allotted.

6. You are further requested to submit distinct proposals for carrying out the recommendations of the Commission in paragraphs 206-207 of their

Report for the encouragement of cultivators to raise vegetables of such descriptions as are approved by the British Soldier, (a list of which should be drawn out, as noticed in paragraph 16 of the letter to the Adjutant-General,) stating the quantities of seed of each sort which should be obtained and distributed in the various Districts of this Presidency, the mode of distribution whether through the Civil Officers of Districts or by Executive Commissariat Officers, and the terms on which they should be given; also the number and amount of the prizes recommended in the latter part of paragraph 206 of the Commission's Report, the persons by whom, and the mode in which, they should be adjudged, &c., &c.

7. Similar information is also desired as to the prizes, if any are necessary, to be given for cattle in addition to those which may be offered by the local Governments at the Cattle Shows referred to in paragraph 15 of the letter to the Adjutant-General; and an estimate showing the probable expenditure, immediate and annual, which will be incurred in all these measures, should accompany.

From LIEUTENANT-COLONEL J. C. SCOTT, Officiating Commissary General, to COLONEL H. W. NORMAN, C. B., Secretary to the Government of India, Military Department, (No. 447, dated Fort William, the 4th March 1864.)

I HAVE the honor to acknowledge the receipt of your No. 745 of the 23rd ultimo, with accompaniments, and in reply have to state, for the information of Government, that orders have been issued for carrying out the recommendations of the Commissariat Commission as regards the preparation of bread by agency on the expiry of existing contracts on the 30th April next so far as it can be effected till the mills for the preparation of flour are imported, the bread in the meantime being made of soojee.

2. Executive Officers have been called on to submit at once requisitions for Patent Dough-making machines, in view to a regular indent being prepared for their being obtained from England, and as regards the flour mills I do not anticipate any necessity for obtaining men from England to set them up and work them, as I believe the Roorkee Establishment can furnish the requisite artificers.

3. Until Government bakeries have been constructed the Commissariat Officers have been instructed to make the necessary arrangements by renting existing buildings, or otherwise obtaining temporary accommodation.

4. The substitution of hop and potatoe yeast for toddy and artificial barm has been ordered, and when bread is rejected the supply in its stead, at the option of Commanding Officers, of soojee or flour in a kneaded state has been authorized; the sizes of the loaves will also be assimilated to those recommended by the Commission.

5. The present contracts for the supply of rice commenced from the 1st February, but a clause was inserted in all the contract deeds admitting of flour being substituted in whole or part for the rice ration, so that there will be no obstacle to this arrangement being carried out at once.

6. Salt on the reduced scale of $\frac{3}{4}$ oz. per man I have directed to be issued from the 1st proximo.

7. Many of the recommendations of the Commissariat Commission have been anticipated and are now in force. I may specify—

I. Intermediate rates between Contract and Command.

II. A new form of Contract Deed meeting the requirements of the recommendation of the Commission, of which abstracts are furnished to Brigade and Station Staff Officers.

III. A 15 days' supply of groceries is stored in advance wherever store-rooms for its accommodation are available.

IV. Contracts for potatoes are now separate and distinct from those for other vegetables.

V. Samples of ration articles that admit of being preserved are enclosed in stoppered bottles as a guide to Commanding Officers and Committee.

VI. The adoption of English scales and weights in issuing rations to Troops was ordered some years ago, and a prohibition against the use of steel-yards has been circulated.

8. Existing meat contracts do not terminate till the 30th April, and the new arrangements are in abeyance pending the orders of Government.

9. Referring to paragraph 5 of your letter under acknowledgment, I beg to recommend that the Civil Officers be instructed to indent on Hissar for bulls to be stationed in their Districts where extensive grazing tracts exist, in view to the cattle upon them having the benefit of an improved cross. I may mention the Googaria District in the Punjab, the Saugor and Nerbudda territories as favorable localities for the experiment; but the Civil Officers, from their intimate knowledge of the Districts under them, and the influence they possess, are best qualified to judge where most advantage would be derived from the measure.

10. As regards the description of ram to be imported as a commencement, I would recommend (10) ten improved Leicester rams and a like number of ewes to be imported and located at Hissar; the ewes will be useful in keeping up the pure English stock, as well as for being crossed with country rams. I would also recommend a like number of Cheviot rams and ewes being imported and located in the Murree Hills near Rawul Pindie, where they would have the benefit of the supervision of the Commissariat Officer at that Station. If they are kept at an elevation of from 4 to 6,000 feet, are sheltered at night, and not exposed to the great variations of temperature that take place, especially in the autumn and beginning of winter, by being placed under cover before the sun goes down and they get chilled, I have no doubt they will continue healthy, and the experiment will prove successful. It will be necessary, however, that they should on no account be permitted to remain in the valleys, as the miasma is sure to affect and prove injurious to them.

11. While on this subject, though it is beyond my province, I may be permitted to suggest that the importation of a few Merino rams for service in the Punjab might prove highly advantageous and give a stimulus to the production of wool, which is already a staple of some importance. The Merino is not a flesh-carrying sheep, but his wool is unrivalled, and the experiment of importing them was tried some years ago successfully by Captain Hutton, of the Invalid Establishment at Musoorie. The fleece from the cross between the country ewe and Merino ram were sent to Rampore (beyond Simla) to be woven into scarfs, and so fine was the quality that the weavers would not believe the fleece to be from sheep, but from the goats of Thibet.

12. In paragraph 6 of your letter I am requested to submit distinct proposals for carrying

out the recommendation of the Commission in paragraphs 206-7 of their Report. With reference to this, I beg to annex a list of the vegetables most approved by the British Soldier, but these will be acceptable merely as supplementing the ration of potatoes, or as a substitute when the latter is not procurable; indeed, the issue of potatoes now extends over so great a portion of the year as to render the supply of other vegetables, onions excepted, of much less importance than formerly.

13. As Commissariat Officers have no influence beyond the limits of the Station, except as the purchasers of vegetables for the Soldiers, I submit that the Civil Officers at the several Stations are best able to judge what quantity of land can with advantage be placed under vegetable cultivation, and that to encourage this being done some abatement from the ordinary rent might be sanctioned; it also rests with them to determine the quantity of seed that can be profitably employed.

14. The decision as to the value and number of prizes that should be offered for the best specimens of cattle, sheep, and vegetables had better be left to Local Committees who might be called on for suggestions for ultimate approval, and from such data the estimates required in the 7th paragraph of your letter might be drawn out with a correctness and precision that cannot be attained from any information that can be furnished by Executive Commissariat Officers.

15. In conclusion, I beg to say that other points touched on in the Report of the Commission, and in your letter No. 741, to the address of the Adjutant-General, are reserved for a future communication.

List of Vegetables.

Description.	REMARKS.
Canliflower ...	} Most approved by the Soldier.
Cabbage ...	
" Savoy ...	
Knole Koll ...	
Carrots ...	
Turnips ...	
Onions ...	
Pumpkin ...	} Should be raised in the Soldiers' Gardens.
Peas ...	
Radish ...	
Beetroot ...	
Lettuce ...	
Squash ...	}
French Beans ...	

(Sd.) J. C. SCOTT, *Lieut.-Col.,*
Offg. Comay. Genl.

From the Hon^{ble} A. EDEN, Secretary to the Government of Bengal, to the Secretary to the Government of India, Military Department, (No. 923T., dated Darjeeling, the 20th June 1864.)

I am directed to acknowledge the receipt of your letter No. 612, dated the 16th March last, forwarding a copy of the Report of the Commissariat Commission, with other papers, and requesting an expression of the Lieutenant-Governor's opinion in respect to improvement in the breed of cattle and in the cultivation of vegetables for the consumption of the European Troops.

2. In reply I am to state, for the information of His Excellency the Governor General in

Council, that in His Honor's opinion it is not necessary or expedient that the Government should take any direct measures for the improvement of the breed of cattle in the Lower Provinces; but the Lieutenant-Governor anticipates that the greatest possible advantage in this respect would ensue from the establishment of periodical Cattle Shows in different parts of the country, such as, in a Minute submitted to the Government of India in the Home Department with my letter No. 2509, dated 31st ultimo, he has already proposed in connexion with the Report of the late Agricultural Exhibition at Calcutta. A copy of this Minute is annexed.

3. In addition to the ten Annual Shows therein proposed it may, His Honor thinks, be thought desirable by the Government of India to have a Special Annual Show of Cattle and Produce, including vegetables, of the same kind and with the same encouragement in every Mofussil District in which there is an European Cantonment, say Patna, Moorshedabad, (Berhampore,) and Darjeeling. The annual expense of three such shows would be Rupees 9,000 in addition to the Rupees 30,000 already asked for.

4. The Lieutenant-Governor is not disposed to think that any good would result from obtaining bulls from the Hissar Farm, as suggested by Colonel Scott, for service in any part of the Lower Provinces. The large Hurriannah cattle, to which breed, His Honor believes, the bulls at the Hissar Farm exclusively belong, are too large for the cows of the Lower Provinces, and it is thought by those most competent to judge that greater attention to the feeding of the young calves, and to the provision of proper pasturage for the grown cattle, with more care in the selection of country bulls for breeding purposes, is what is chiefly required for the improvement of the stock rather than the importation of foreign blood.

5. This, I am to observe, is more especially the case as regards the improvement of cattle for draught purposes; but even if a foreign cross is desirable for improving the native breed with a view to obtain a better quality of beef or of dairy produce, it seems to the Lieutenant-Governor that the process should rather be left to private enterprise, under due encouragement, than that Government should take any direct action in the matter by the introduction of bulls into Bengal either from Hurriannah or from elsewhere.

6. I am to annex, for the information of His Excellency in Council, a copy of a correspondence* which has taken place on this subject between this Government and the British Indian Association, the Landholders' and Commercial Association, and the Agricultural Society.

7. As regards the production of vegetables of those kinds which are acceptable to the European Soldiers, the Lieutenant-Governor considers that this may also be best

* Letter to Officiating Secretary, Agricultural Society.

Letter to Secretary, British Indian Association.

Letter to Secretary, Landholders' and Commercial Association, Nos. 981T. to 983T., dated 6th October 1863.

Letter from Honorary Secretary, British Indian Association, dated 5th February 1864.

Letter from Secretary, Landholders' and Commercial Association, dated 27th February 1864.

Letter to Secretary, Agricultural and Horticultural Society, No. 1304, dated 14th March 1864.

Letter to Honorary Secretary, British Indian Association, No. 1305, dated 14th March 1864.

Letter to Secretary, Landholders' and Commercial Association, No. 1806, dated 14th March 1864.

Letter from Secretary, Agricultural and Horticultural Society, dated 26th March 1864 with enclosure.

left to private gardeners, stimulated by the prospect of a certain and profitable market for their produce, and by such encouragement as the proposed periodical shows will afford. It seems probable that more dependence might be placed on Soldiers' gardens for a supply of vegetables for the Troops than the Commission think practicable, and that, as a matter of discipline, such gardens, especially at Hill Stations, might be made the means of providing the men both with healthy and profitable occupation, and with such esculents as may be most agreeable to them. The shows would, perhaps, have the effect of exciting competition even among the Soldiers themselves; but the Lieutenant-Governor does not think that Soldiers' gardens will ever be of any real use until labor there is made compulsory instead of voluntary, and the gardens are placed under some regular system of control. Little is to be expected from the disjointed unsystematic action of the men themselves.

8. The cultivation of vegetables in Jail gardens ought in general, His Honor thinks, to be limited to the extent required for the use of the Jail and for providing a certain amount of healthy out-door occupation for the prisoners close to the Jail and under proper surveillance. But any surplus produce would always be available for purchase by the Contractors by whom the Troops are supplied, and the Inspector-General of Jails will, I am to add, be instructed to encourage in the Jail gardens at Stations near European Cantonments the cultivation of such vegetables as are suited to the consumption of European Soldiers.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Secretary to the Agricultural and Horticultural Society,—(No. 8051, dated the 20th July 1864.)

I AM directed to acknowledge the receipt of your letter dated the 29th March last, and to convey to you the thanks of the Lieutenant-Governor for the Report submitted by the Society on the best means of improving the breed of Bengal cattle.

2. A copy of the Society's Report has been forwarded to the Government of India in the Military Department with reference to the recommendation for Local and Central Cattle Shows to be held annually which the Lieutenant Governor offered when reporting on the late Agricultural Exhibition.

3. The whole of the correspondence on the subject will be published in the *Calcutta Gazette* Supplement, and copies of it will also be forwarded to the different Commissioners of Divisions for distribution among the Zemindars and other persons likely to read them and to profit by the information they contain. But as the Lieutenant Governor desires that the papers referred to in the 7th paragraph of the Committee's Report received with your letter under reply should be also published and circulated to the Commissioners, I am to request that the Society will be so good as to forward them to this Office at as early a date as practicable, in order that they may be printed with the rest of the correspondence in this Office.

4. The Board of Revenue will be requested to consider the subject and to report what further practical measures can be taken by Government with a view to give effect to the recommendations of the Society.

5. Adverting to the 2nd paragraph of my letter No. 1304 of the 14th March last, I am desired again to urge on the Society the Lieutenant-Governor's wish that they should undertake the preparation of a brief Manual, to be translated into the native languages and widely circulated, containing practical suggestions to Zemindars, Ryots, and all classes of Agriculturists for the more careful breeding, rearing, and pasturage of cattle.

From A. H. BLECHYNDEN, Esq., Secretary, Agricultural and Horticultural Society, to the Junior Secretary to the Government of Bengal,—(dated the 27th July 1864.)

I HAVE the honor to acknowledge the receipt of your letter No. 8051 of the 20th instant, and to enclose, with reference to the 3rd paragraph thereof, a copy of the papers forming an Appendix to the Report of the Society's Committee on the best means of improving the breed of Bengal cattle.

2 I am instructed to express the regret of the Society at the delay which has taken place in preparing the Manual suggested in the 2nd paragraph of your letter No. 1304 of the 14th March last. This has been caused by the temporary absence from Calcutta of more than one Member of the Committee.* It will, however, be shortly put in hand and translated into the native languages.

Appendix to the Report of the Agricultural and Horticultural Society.

Extract from a letter of CAPTAIN PARSONS, Superintendent of the Government Stud at Hissar, to the Secretary of the Agricultural Society of India,—(dated the 27th April 1855.)

I HAVE the pleasure of your letter of the 14th instant, and most willingly hand you some information respecting our Cattle Farm, and shall be happy to hand you any other that is in my power. I am much inclined to think that a large breed or description of cattle would not thrive in Bengal, for as the cattle of that part of the country are by nature small, I think it very clearly points out that there must be something in the soil and climate unfavorable to the development of great size, therefore I think that large cattle will deteriorate without improving the smaller breed; indeed, for cattle to improve when transplanted, it is necessary they should be removed to where the soil and climate are superior to the place from whence they came: however, there is nothing like actual trial for proof. The Mysore cattle, though very active and blood-like in appearance, are much too slight and low for the guns, but of their kind they are an excellent description of cattle, still I hardly expect that any crossing will increase their bulk much, though at present it is impossible to say: however, they shall have fair play here, and every advantage possible to see if anything can be made.

P. S.—Upon reflection I think it very possible that a cross of the Mysore cattle would be the very thing for Bengal, for, though small, they possess great activity and spirit, and work well; indeed, Lord William considered them amongst cattle what the Arab is amongst horses, and though they are not adapted for ordnance purposes for want of height and substance, yet for light draught and wells they would be admirable.

Memorandum enclosed in CAPTAIN PARSONS' letter of 27th April 1835.

THE cattle employed at the Hurrianah Establishment consist of the Nagpore, Guzeerat, Angole, Hurriana, Sinda, and Mysore breeds. The qualities of the Nagpore breed are height, substance, and speed; of the Guzeerat, height, greater substance, but of a duller disposition than the Nagpore. The Angole has height and very great substance, can endure great fatigue upon coarse food, and lives to a great age. The Hurriana can endure great fatigue upon coarse food, but has not the height or substance of the former breeds. The Sinda has great substance, but is too low and lazy. The Mysore is strong and active for its size, but is too low for ordnance purposes.

2. The crosses made from the above breeds are the Nagpore, Hurriana; Guzeerat, Hurriana; Nagpore, Sinda; Angole, Hurriana; Sinda, Angole; Nagpore, Sinda, Angole; Guzeerat, Nagpore, Hurriana; Nagpore, Angole; Guzeerat, Nagpore, Angole; Angole, Nagpore, Sinda; Angole, Guzeerat, Hurriana; and Angole, Guzeerat, Nagpore, Hurriana. The most successful crosses are from the Nagpore, Guzeerat, and Angole bulls, which are the only bulls now kept. The best draught cattle are from the Nagpore Angole, Guzeerat, Hurriana; Angole, Guzeerat, Hurriana; and the Guzeerat, Nagpore, Angole crosses: the latter promises to be the best cross we have made. The only cross tried with the Mysore cattle has been with the Nagpore bull, and their produce now in the farm vary in age from one to eight months. They are much superior to the pure Mysore breed and equal in height to the crosses of the Nagpore and Guzeerat bulls by the Hurriana cow, but have not so much substance, and apparently will only be adapted to light and active work.

3. The young bull is fit for duty at three years old; the custom of the country varies from two to four years.

4. The male produce of the farm are castrated at three years old; experiments have been made at one year, one-and-a-half years, and two-and-a-half years old, but the former has been found to answer best; the custom of the country is at three years old.

5. Calves are separated from their mothers at from seven to nine months old agreeably to their condition and the season of the year; those intended for the service remain with their herd until five years old.

Extract from the Report of CAPTAIN PARSONS, Superintendent, Hissar Establishment, to the Commissary General, upon experimental cattle received from Mysore,—(dated the 18th August 1832.)

[Communicated in a letter from Colonel Beatson, Commissary General, to the Agricultural Society of India, dated 12th May 1838.]

THE cattle are small and slight, and very inferior in general appearance, size, and substance to any of our farm cattle or to the common description of cattle of this part of the country. I consider them quite unfit for ordnance purposes, (unless when the better cattle are not procurable,) for they have not sufficient height, or that general substance and weight without which neither horses nor horned cattle are calculated for heavy draught. There are twenty-seven bullocks stated in the Return to be now fit for transfer to the

service. And though they are rising seven years of age or more (which is two years older than our own farm cattle are transferred to the service) only three of them are the regulated height (of fifty-two inches) for draught cattle, and sixteen out of the twenty-seven are not even fifty inches. The height fixed for carriage bullocks, (their several heights are inserted in the margin,) and as far as the cattle are stated to have been selected with great care and from the best herds, it is to be supposed that the twenty-seven bullocks must be a favorable specimen of them.

The Mysore cattle are said to be possessed of great activity and endurance, and admitting that they are, I hope the same qualities will be allowed to our farm cattle, as they certainly do possess them, and with the additional (and indispensably necessary) one of height and great general substance, therefore to keep the Mysore cattle here when so many of them will not be fit even for carriage bullocks, besides the necessity for keeping them so much longer at the farm before they are fit for transfer to the Commisariat (for the five years old bullocks are not to be compared to the farm bullocks of three years old either in height, strength, or general appearance) will, I think, be attended with loss and disappointment to Government, and be a heavy and useless expense to this Establishment.

I may here also remark that at the Madras Presidency the proportion of bullocks for ordnance purposes is (I understand) as follows:—To a 24-pounder fifty bullocks, an 18-pounder forty-four bullocks, and a 12-pounder thirty-six bullocks, whereas here there are only twenty-six bullocks to a 24-pounder, twenty-two bullocks to an 18-pounder, and eighteen bullocks to a 12-pounder, consequently, if the Mysore bullocks were even to attain the regulated height, double the number of them would be required for the guns, and thus cause a double expense.

Extract from a letter of COLONEL SKINNER, to the Secretary of the Agricultural Society of India,—(dated Hansi, the 13th May 1835.)

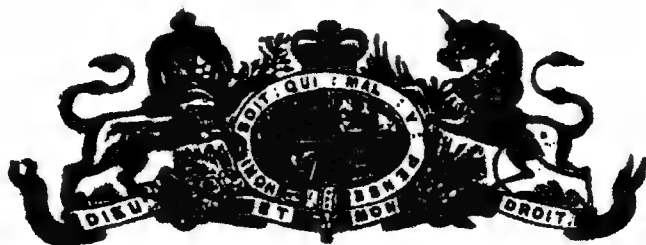
I REGRET my inability of giving you the sort of information you require, for I have never seen the large Mysore cattle which you allude to, and am therefore unable to pass an opinion as to whether their introduction and intermixture with the Bengal breed, as recommended by Lord William Bentinck, would produce such efficient cattle as are required for the general service of the State; however, from what I have seen of the smaller kind of the Mysore cattle which were sent to Hissar in 1831, I must confess that they appear to have more blood than any of the Hindustani breed. Their size was considered a very great objection against them, and on which account they were sold off by outcry, having been considered as too small for general service. I purchased a number of these cows, as I am firmly of opinion that the third or fourth cross with the Nagore will produce a far superior breed than what we now have in the country. The Mysore cattle merely want substance, as they are otherwise not deficient in any point, and appear to have far greater animation in them than our country breed. I therefore

think that if the larger cattle are introduced into Bengal their intermixture will produce a very efficient breed after the third or fourth removal. My opinion of course can have little benefit, as it is only founded on conjecture and what I have seen of the smaller kind. I have now a great many young cattle in my farm, the produce of Mysore cows from Nagpore bulls, and they are very promising; however, I do not conceive myself competent to form a decisive or satisfactory opinion until I have seen the third generation, as they must be thus far removed from the original before they can acquire the same degree of substance for which our Hurriana breed are so proverbial.

Extract of a letter from COLONEL FRANCIS JENKINS, Commissioner of Assam, to the Secretary of the Agricultural and Horticultural Society,—(dated Gowhatty, the 24th June 1835.)

I was well pleased with your Committee's Report on the Bengal cattle. It is a blood animal, and pastures and work remaining the same I am not sure that it could be at all improved by any cross. But I will suggest the only crosses that would succeed. When the cattle are required for milk principally the cross should be with the pure Sinde breed; it is not a

large one, and it is the finest milch breed in India, and the most beautifully proportioned animal of the cow kind in the world possibly. The large long-legged Hurriana cattle would come to nothing in Bengal. Where the cross is required for labor, the Nagpore cattle are the only animals that would by any possibility be crossed with the Bengal cattle to their improvement. The Nagpore bullock is not much larger than the bullock of Bengal, (at least the cross should be with the smaller animals,) and it is beyond doubt the most active bullock in India; it is more lively than the Bengal bullock, and possesses all its perseverance with a more tractable temper. The best market for Nagpore cattle is at Hingur Ghats, twenty-four miles south of the city. The gentry of Nagpore have especially raised this breed for the purposes of carriage draught cattle: its lightness and speed is wonderful. I have known a pair go ten miles within the hour drawing a palkee garee, and beating a tolerable good horse in a buggy. I am quite sure these are the only crosses that could be advantageously made with cattle of Bengal, and the attempt should not be made at first with the cattle of South Bengal but of North. Either of the breed I have mentioned would cross beautifully with the Purneah cattle, which most approximate in size and conformation to the Sinde and Nagpore cattle.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, AUGUST 24, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of six Rupees per annum if delivered in Calcutta, or twelve Rupees if sent by Post.

No Official Orders or Notifications, the publication of which in the GAZETTE is required by Law, or which has been customary to publish in the GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to as heretofore.

Treatment of the apparently Drowned.

ROYAL NATIONAL LIFE-BOAT INSTITUTION.

DIRECTIONS FOR RESTORING THE APPARENTLY DROWNED.

THE leading principles of the following Directions for the restoration of the apparently Dead from Drowning are founded on those of the late DR. MARSHALL HALL, combined with those of DR. H. R. SILVESTER, and are the result of extensive inquiries which were made by the Institution in 1863-64 amongst Medical Men, Medical Bodies, and Coroners throughout the United Kingdom. These Directions have been extensively circulated by the INSTITUTION throughout the United Kingdom and in the Colonies. They are also in use in Her Majesty's Fleet and in the Coast-guard Service:—

I.

SEND immediately for medical assistance, blankets, and dry clothing, but proceed to treat the patient *instantly* on the spot, in the open air, with the face downward, whether on shore or afloat; exposing the face, neck, and chest to the wind, except in severe weather, and removing all tight clothing from the neck and chest, especially the braces.

The points to be aimed at are—first and immediately, the RESTORATION OF BREATHING; and secondly, after breathing is restored, the PROMOTION OF WARMTH AND CIRCULATION.

The efforts to restore Breathing must be commenced immediately and energetically, and persevered in for one or two hours, or until a medical man has pronounced that life is extinct. Efforts to promote Warmth and Circulation, beyond removing the wet clothes and drying the skin, must not be made until the first appearance of natural breathing. For if circulation of the blood

be induced before breathing has re-commenced the restoration to life will be endangered.

II.

TO RESTORE BREATHING.

To Clear the Throat.—

Place the patient on the floor or ground with the face downwards, and one of the arms under the forehead, in which position all fluids will more readily escape by the mouth, and the tongue itself will fall forward, leaving the entrance into the windpipe free. Assist this operation by wiping and cleansing the mouth.

If satisfactory breathing commences use the treatment described below to promote Warmth. If there be only slight breathing—or no breathing—or if the breathing fail, then—

To Excite Breathing—

Turn the patient well and instantly on the side, supporting the head, and—

Excite the nostrils with snuff, hartshorn, and smelling salts, or tickle the throat with a feather, &c., if they are at hand. Rub the chest and face warm, and dash cold water, or cold and hot water alternately, on them.

If there be no success, lose not a moment but instantly—

Re-place the patient on the face, raising and supporting the chest well on a folded coat or other article of dress.

Turn the body very gently on the side and a little beyond, and then briskly on the face, back again; repeating these measures cautiously, efficiently, and perseveringly about fifteen times in the minute, or once every four or five seconds, occasionally varying the side.

[By placing the patient on the chest the weight of the body forces the air out; when turned on the side, this pressure is removed, and air enters the chest.]

On each occasion that the body is re-placed on the face make uniform but efficient pressure with

brisk movement on the back between and below the shoulder-blades or bones on each side, removing the pressure immediately before turning the body on the side.

During the whole of the operations let one person attend solely to the movements of the head and of the arm placed under it.

[*The first measure increases the expiration—the second commences inspiration.*]

* * The result is *Respiration or Natural Breathing*;—and if not too late, *Life*.

Whilst the above operations are being proceeded with dry the hands and feet, and as soon as dry clothing or blankets can be procured, strip the body and cover, or gradually re-clothe it, but taking care not to interfere with the efforts to restore breathing.

III.

Should these efforts not prove successful in the course of from two to five minutes, proceed to imitate breathing by DR. SILVESTER'S method as follows:—

Place the patient on the back on a flat surface, inclined a little upwards from the feet; raise and support the head and shoulders on a small firm cushion or folded article of dress placed under the shoulder-blades.

Draw forward the patient's tongue, and keep it projecting beyond the lips: an elastic band over the tongue and under the chin will answer this purpose, or a piece of string or tape may be tied round them, or by raising the lower jaw, the teeth may be made to retain the tongue in that position. Remove all tight clothing from about the neck and chest, especially the braces.

To imitate the movements of Breathing—

Standing at the patient's head grasp the arms just above the elbows, and draw the arms gently and steadily upwards above the head, and keep them stretched upwards for two seconds. (*By this means air is drawn into the lungs.*) Then turn down the patient's arms and press them gently and firmly for two seconds against the sides of the chest. (*By this means air is pressed out of the lungs.*)

Repeat these measures alternately, deliberately, and perseveringly, about fifteen times in a minute, until a spontaneous effort to respire is perceived, immediately upon which cease to imitate the movements of breathing and proceed to INDUCE CIRCULATION AND WARMTH.

IV.

TREATMENT AFTER NATURAL BREATHING HAS BEEN RESTORED.

To promote Warmth and Circulation—

Commence rubbing the limbs upwards with firm grasping pressure and energy, using handkerchiefs, flannels, &c.: [*By this measure the blood is propelled along the veins towards the heart.*]

The friction must be continued under the blanket or over the dry clothing.

Promote the warmth of the body by the application of hot flannels, bottles, or bladders of hot water, heated bricks, &c., to the pit of the stomach, the arm-pits, between the thighs, and to the soles of the feet.

If the patient has been carried to a house after respiration has been restored, be careful to let the air play freely about the room.

On the restoration of life, a teaspoonful of warm water should be given; and then, if the

power of swallowing have returned, small quantities of wine, warm brandy and water, or coffee, should be administered. The patient should be kept in bed and a disposition to sleep encouraged.

GENERAL OBSERVATIONS.

The above treatment should be persevered in for some hours, as it is an erroneous opinion that persons are irrecoverable because life does not soon make its appearance, persons having been restored after persevering for many hours.

Appearances which generally accompany death.

Breathing and the heart's action cease entirely; the eyelids are generally half-closed; the pupils dilated; the jaws clenched; the fingers semi-contracted; the tongue approaches to the under edges of the lips, and these, as well as the nostrils, are covered with a frothy mucus. Coldness and pallor of surface increase.

CAUTIONS.

Prevent unnecessary crowding of persons round the body, especially if in an apartment.

Avoid rough usage, and do not allow the body to remain on the back unless the tongue is secured. Under no circumstances hold the body up by the feet.

On no account place the body in a warm bath, unless under medical direction, and even then it should only be employed as a momentary excitant.

By Order of the Committee,

RICHARD LEWIS,

Secretary.

Plan for the Distribution of Seeds from the Botanic Gardens.

From T. ANDERSON, Esq., M. D., Superintendent, Botanical Garden, Calcutta, to F. R. COCKRELL, Esq., Officiating Secretary to the Government of Bengal, (No. 65, dated the 24th November 1868.)

IN reply to the last paragraph of your letter No. 419T., dated Bhaugulpore, the 31st August 1868, I have the honor to submit the details of the plan of collecting seeds in the Botanic Garden, which I recommend should be adopted. In my last annual Report I referred to the great complaints made about the bad quality of the seeds distributed from this Garden. These arise entirely from the want of a well-organized Department for seed collecting and distribution. The system at present followed in this Garden, and which has been in force at least for forty years, as the elder Mallees in the Garden inform me, and apparently even since the formation of the Garden, is as follows:—

A large one-storied pukka building of two rooms surrounded by a side verandah was built many years ago as a seed house and as a general receptacle for specimens of economic botany and timber. With these specimens the building is overcrowded. Some eight or ten Mallees were put in charge of this building and its collection, and three or four of these were ordered to collect all seeds that they could find in the Garden. These men go where they please in the Garden, collecting seeds from all trees or plants with seed

on them, and bring all their collections to the seed house, where they are collected in heaps. They bring them without any name attached, trusting entirely to their memory for the names; this results in frequent mistakes, not merely from seeds of nearly allied species being collected on the same morning, and confusion arising from the similarity of their seeds, but also from carelessness and stupidity on the part of the boys entrusted with cleaning the seeds. These seed collectors, in order to save themselves trouble, always strip a tree of its crop of seeds at once, or at least within a few days, whereas the period of collecting its seed ought to have extended over a month or six weeks before all the ripe seeds can be obtained. The present system results in probably only 10 per cent. of mature seeds being collected, while all the collection is retained as good. Another source of bad seed is the retaining of the remainder of the last year's collection in the seed boxes or bags, in order to save trouble in cleaning and collecting fresh seeds yearly. These and other minor irregularities are the causes of the great complaints of the bad quality of the seeds sent out from this Garden. To remedy them the entire system of seed collecting and distribution will require to be re-organized. The plan I recommend should be followed is founded on the method which prevails in the *Jardin des Plantes*, and is as follows:—

1st.—To publish at stated periods (every two or three years) an *Index Seminum*, &c., &c., or a Catalogue of all seeds available at the Botanic Gardens, Calcutta. The basis of this list would be the Catalogue of plants cultivated in the Botanic Garden, Calcutta, of which forty-eight pages are printed. The list of seeds would be compiled from this Catalogue by extracting from it the names of all species known to produce good seed in the Gardens. This list would be distributed once a year to all the Botanic Gardens in the world, (just as I receive yearly lists from most of the Botanic Gardens in Europe,) and to all private individuals applying for it. The list would contain a request that it might be returned to me with the desiderata marked in it before a certain date which I shall afterwards fix. In order to ensure the correct naming of the seeds and their good quality I propose, to entirely re-model the system of collecting, cleaning, and distribution, to place them under the immediate charge of the Curator of the Herbarium or the Assistant Curator. In large Botanic Gardens it has been found necessary that the seed collecting and distributing Department should be entirely distinct from the growing Department. The Assistant Curator would be provided with an interleaved copy of the list of seeds, or rather for him it would be of seed-bearing plants. In the list there would be written opposite every species the dates of the commencement and termination of the period of collecting its seeds. The duty of the Assistant Curator in charge of the seed Department would be to supply the Native seed collectors every Monday morning with a list of the species of seeds to be collected during the week, to see the collection daily before they were cleaned, in order that all unripe seeds might be rejected. On Saturday three or four hours would be devoted by him to examining the cleaned collections of the week, and to placing them, if dry and properly prepared, in the drawer or sack appropriated to each species. His last duty on that

day would be to draw up the list for collection on the following week, the list to be given to the collector on Monday morning. On the date fixed as the latest for the receipt of marked Catalogues from Botanic Gardens, &c., the distribution would commence. The first step would be the completion of a list of all species applied for, in order that an accurate division of the rarer species might be made. A few copies of the Catalogue printed only on one side of a page would be struck off, so as to admit of the name of each species being cut out as a label. There would be one attached to each seed packet, so as to save time and the expense of a Writer. The distribution would probably last through an entire month, during which time the Curator would devote every day to the superintendence of the work. When all seeds applied for had been distributed those remaining in store would be destroyed, every drawer or sack being emptied, so as to ensure an entirely new collection being made during the following year. There are some other minor details, such as storing the seeds in drawers, in cabinets, or in sacks, with the name legibly printed on the place for each species. On the immediate dispatch of all seeds whose vitality lasts only a few days frequent visits of the Assistant Curator to the Garden for the purpose of examining trees in order that he make corrections or additions to his weekly list. This would naturally be done in the morning, and would not interfere with the regular duties of the Assistant Curator in the Herbarium. Such a system being organized in a Department where everything has been left to chance and the freaks of Natives, where the only means of distributing the vast quantities of seed collected yearly in this Garden, amounting to many maunds in weight, has been the issuing of such a general order by the Superintendent to one of the Mallees in the seed house, "make up a collection of all the palm seed for such a Garden, or a collection of all the seeds of climbing plants." Such a system would do much towards giving a stimulus to horticulture in India and to our Tropical Colonies, while it would bring before other scientific Establishments every year the list of the many Botanical riches of this Garden with an invitation from them to apply for them in exchange for those they possess. The expenses of the plan would not be great.

They would be as follows:—

Special allowance to the Assistant Curator of the Herbarium for superintending the collecting and distributing of seeds and conducting all the correspondence, &c.,

	Rs.	As.	P.
Rupees 100 a month yearly	...	1,200	0 0
<i>Native Establishment.</i>			
<i>Per Annum.</i>			
Two Seed-collectors, at Rupees 8 and 9 each, respectively, a month	...	204	0 0
A Store-keeper, Rupees 8 a month	...	96	0 0
A Seed-cleaner, Rupees 7 a month	...	84	0 0
Two boys, at Rupees 4 each	...	96	0 0
Annual expense for wax cloth, paper, and sealing wax, cord, packing boxes, gunny bags, &c.	...	200	0 0
Postage on letters and freight for dispatch of parcels of seeds	...	250	0 0
<i>Extraordinary Charges for the first year.</i>			
Purchase of two teak wood Almirahs with drawers for seeds, Rupees 250 each	...	500	0 0
Printing 400 copies of <i>Index Seminum</i>	...	150	0 0
Total Rupees	...	2,760	0 0

If this detailed plan receives the approval of the Lieutenant-Governor, I shall be prepared to commence it at once by printing and distributing the *Index Seminum*, &c., &c., by procuring cabinets, and organizing the Establishment, so as to begin the first distribution of seeds in the end of April, and thus to admit of the sowing of the seeds by the applicants in India by the commencement of next rains.

From T. ANDERSON, Esq., M. D., Superintendent, Botanic Gardens, Calcutta, to F. R. COCKRELL, Esq., Officiating Secretary to the Government of Bengal,—(No. 68, dated the 5th December 1863.)

IN continuation of my letter No. 65, to your address, submitting a plan for the distribution of seeds from the Botanic Gardens on the method followed in the *Jardins des Plantes*, I have the honor to submit the following supplement to the plan therein laid down, in order to show how far the expenses attending the distribution of seeds may be reimbursed.

To carry out the distribution with the view of selling the seeds to applicants who do not exchange seeds with this Garden it would be necessary to classify the seeds somewhat as follows:—

- Seeds of Timber trees,
- Ditto ornamental and fruit trees,
- Ditto flowering shrubs,
- Ditto Palms,
- Ditto flowering perennial herbs and plants,
- Ditto annual plants, and

Lastly, a class might be made of climbing plants. Packets of each of those classes would be sold at different rates according to the number and rarity of the species of seed in each.

A packet containing fifty kinds of the common flowering shrubs might be charged at Rupees 5, a packet of seeds of ten or any small number of rare kinds of the same class would be charged at not a lower rate than Rupees 5, and so on for the other classes. Seed of Timber trees would be sold by weight according to kind. Seed of Teak, which is abundantly produced in the Botanic Gardens, and is being light, would be sold by the seer, probably at the charge of 1 Rupee. Heavier seeds would be cheaper. This refers only to the seeds of common Timber trees, such as Teak, Sissoo, Saul, Dibdarre, &c., &c. The many valuable species of Timber trees in this Garden, such as Mahogany, of which a limited supply exists, and of which the seeds are huge and heavy, must be charged at separate and varying rates according to the species. Palms would generally be charged at a fixed price for each seed; few are small and abundant enough to be sold by weight. The dates on which all the seeds of the previous six months collecting would be available to applicants would be advertised in the *Government Gazette*, the daily Newspapers of Calcutta, and perhaps of Madras and Bombay, and also the *Delhi Gazette* Newspaper. The advertisement might contain the price of the packets of seed according to the classification, and that Timber seeds and Palm seed are sold by weight and by number for the larger and rarer kinds, the rates

of which can be ascertained by special reference to the person in charge of the distribution.

2. As regards the probability of the expenses being reimbursed by the sale of seed I can offer no decided opinion, but I think it is likely that at least Rupees 1,500 will be realized the first year by the sales. The data which induced me to think so are the following:—124 packets of seed were distributed last year from this Garden. In 1861-62 sixty packets of seed, containing each from fifty to one hundred species, were exchanged with different Botanic Gardens, and in my Report of that year it is noted that "numerous applications for seeds and ornamental plants have been received from residents in Calcutta, but in accordance with the orders of Government all such applications have been refused." In 1860-61 thirty-five packets were distributed. Though the distribution of seeds amounted to 124 packets last year, still I refused many applications, partly for want of Establishment to carry on the work of collecting and distribution, but greatly from the want of confidence I have in the seeds being at all likely to germinate under the present system of collecting and storing. If the number of applicants even reached to double the amount distributed last year under the present system, and Rupees 5 a packet were charged, an income of Rupees 1,250 would be obtained. It is probable that, were the distribution made generally known, the applications would be far more than double the number I reported as complied with last year. The sale of seeds of Timber trees ought alone to realize a considerable amount; no seed of this class of tree is ever distributed, except to Botanic Gardens, from the expense attending the preparing of large packets. I can find no account among the older records in my Office of what the amount of seeds distributed formerly was. Dr. Wallich, in his Report of the years 1836 to 1840, states that applications from 2,107 individuals were complied with, and (portions of these were provided for by seeds only) in four years, or at the average of 526 applications annually. Could such a distribution of seeds be attained now, and there is no reason why it should not, the revenue by sale would much exceed the expenses of collecting. If the general plan proposed in these two letters receive the sanction of Government, I shall be able to submit at a future date all the details of Catalogues, classes of seeds, prices, and dates, with form of advertisement, for the approval of the Lieutenant-Governor.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Superintendent of the Botanical Gardens, Calcutta,—(No. 12, dated the 4th January 1864.)

I AM directed to acknowledge the receipt of your letters Nos. 65 and 68, dated, respectively, the 24th November last and the 5th ultimo, and in reply to state that the Lieutenant-Governor approves of the plan therein recommended for the distribution of seeds from the Botanic Gardens, and authorizes you to include the amount of expenditure which it is estimated to involve (Rupees 2,780) in the next year's Budget.

2. His Honor hopes that, as anticipated by you, all arrangements for the systematic distribution of seeds will be ready in April next.

Report on the Constitution and Working of the Government Stationery Office.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Secretary to the Board of Revenue,—(No. 3327, dated the 10th August 1864.)

I AM directed to transmit the accompanying

* Letter dated 25th March 1864, with enclosures, from Stationery Committee.

Letter to Government of India, Financial Department, No. 2431, dated 23rd May 1864.

Letter from Government of India, Financial Department, No. 951, dated 22nd June 1864.

copy of the correspondence,* and to request that the Board of Revenue will be so good as to issue the requisite instructions to the Superintendent of Stationery, and to take

such other measures as may be necessary, for carrying out the suggestions submitted by the Stationery Committee, and sanctioned by the Government of India on the 22nd June last.

2. The Board are requested to submit the explanation called for in the 5th paragraph of Mr. Lushington's letter regarding the rates of annual increase to be given to the Establishment of the Stationery Office.

3. A copy of the correspondence will be published for the information of all public Officers.

From E. H. LUSHINGTON, Esq., Secretary to the Government of India, Financial Department, to the Junior Secretary to the Government of Bengal,—(No. 951, dated Simla, the 22nd June 1864.)

I AM directed to acknowledge the receipt of your letter No. 2431, dated 23rd May 1864, submitting, for orders, a Report from the Committee appointed to enquire into the constitution and working of the Stationery Office, with the recommendation of the Lieutenant-Governor that the suggestions of the Committee, both in regard to the re-organization of the Establishment of the Stationery Office, and to its external administration so far as it relates to the Offices under the Government of Bengal, may be carried out.

2. In reply I am desired to request that you will convey to the Members of the Committee the thanks of His Excellency the Governor General in Council for the very valuable Report submitted by them.

3. The several suggestions of the Committee in regard to the sizes of Paper to be used and other points noticed in the 27th, 28th, and 33rd paragraphs have been referred to the Home Department with the remarks of this Department.

4. The plan proposed for the special audit of the accounts of the Stationery Department by the deputation of a competent Officer from the Office of the Deputy Auditor and Accountant-General is approved, on the understanding that the Deputy Auditor will be left to depute any qualified Officer of his Establishment, and that in case of any circumstance requiring his personal interference he will go himself; but there will, of course, be no extra remuneration for this any more than for any other ordinary duty of the Establishment.

5. Respecting the proposed scale of Establishment for the Stationery Office, His Excellency observes that the rates of annual increase of salary of the Clerks are not stated in the Schedule in the Appendix. The Establishment is, however,

sanctioned, subject to explanation on this point and with the exception of Clerks for the Bill Audit Branch which, under the late orders sanctioning fixed contract allowances, will not be required.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Secretary to the Government of India, Financial Department,—(No. 2431, dated the 23rd May 1864.)

With reference to your letter No. 291, dated the 16th January last, I am directed by the Lieutenant-Governor to submit, for the consideration and orders of His Excellency the Governor General in Council, the accompanying copy of a

* Dated 25th March 1864.

Report,* with enclosures, from the Committee appointed to enquire into the constitution and working of the Stationery Office, with a view to its increased usefulness as an efficient check on expenditure.

2. The suggestions of the Committee both in regard to the re-organization of the Establishment of the Stationery Office, and to its external administration so far as it relates to the Offices under this Government, have the Lieutenant-Governor's approval, and His Honor recommends that they should be carried out.

From the Committee appointed to inquire into the working of the Stationery Office, to the Secretary to the Government of Bengal,—(dated the 25th March 1864.)

In accordance with the orders conveyed in your letter No. 607, dated the 2nd ultimo, and in the enclosure from the Secretary to the Government of India, in the Financial Department, No. 291 of 16th January, we have the honor to report the result of our enquiry into the constitution and working of the Stationery Office in Calcutta.

2. The points of enquiry prescribed in the communication from the Financial Department appear to be these—

First.—The present distribution of work in the several Departments of the Stationery Office.

Secondly.—The efficiency of the existing checks upon the expenditure of Stationery; the tests by which any excess is discovered in Indents beyond a sanctioned scale; the ability of the Office to apply these tests intelligently, and to improvise appropriate checks for any items of increasing expenditure which cannot be reduced to scale and rule.

Lastly.—The Committee are invited to offer suggestions for increasing the efficiency of the Stationery Office as a check upon expenditure, and thus adding to its usefulness as a Custodian and Issuer of Stores.

3. In discussing these several points and the business of the Stationery Office generally it has been our object, by simplifying forms and processes,

to diminish clerical labor as far as possible; and, on the other hand, by the application of checks heretofore unknown or imperfectly carried out, to promote the efficiency of the Office in controlling expenditure. In furtherance of this view we

have framed a revised Schedule of Establishment adapted to the proposed arrangement of work.

4. The present divisions of the Stationery Office are as follows, viz.:—

	No. of Clerks.	Total monthly Cost.
The Correspondence Branch ...	5	Rs. 119
The Cash Branch ...	1	20
The Bill Audit Branch ...	3	73
The Store-keeper's Branch ...	4	172
The Despatcher's Branch ...	3	82
The Accountant's Branch ...	7	171
The Store Indent Branch ...	3	66
The Form Indent Branch ...	3	62
Head Assistant ...	1	300
Duftry, Peons, Coolies, &c. ...	...	69
Total ...	30	1,134 per month.

The duties of the Clerks of these several branches are stated in detail in the enclosure A.*

5. The Correspondence Branch calls for no further remark than that by the use of improved Registers of correspondence and printed forms the clerical work might be so diminished as to admit of the number of Clerks being reduced from five to three.

6. The employment of a Cashier, however necessary whilst supplies of Stationery were obtained by local contracts, may be dispensed with in consequence of the Resolution of the Home Authorities to send out all future supplies from England. We propose to assign to the Head Assistant the payments for such minor stores as must still of necessity be obtained locally.

7. The Bill Audit Branch is employed in checking the Contingent Bills of the several Government Offices for petty articles of Stationery, silk, thread, paste, &c. By a re-arrangement of the duties it will be possible to dispense with the services of one Clerk, whose chief duty at present is to compare the duplicate with the original Contingent Bills. The services of the remaining Clerks in this branch could also be dispensed with in the event of Government sanctioning our proposal for the grant of a fixed contract allowance to cover all charges heretofore included in the "Stationery Contingent Bills" of public Officers.

8. The Store-keeper's and Despatcher's Branches might with advantage be consolidated under one responsible head. In practice the existing arrangement has been found inconvenient, more

especially in fixing responsibility for deficiencies discovered in parcels of Stationery forwarded to Mofussil Offices. No doubt this could be obviated by the use of checks similar to those employed in large warehouses in England, and in some of the manufacturing Departments in India; but looking to the petty character of the stores, and the number and variety of small parcels despatched from the Stationery Office, we think it desirable to unite the Store and Despatch Branches under one head and to hold him responsible for the correct fulfilment of every requisition on the Stationery Office. In consideration of this extra responsibility we propose to increase the pay of the Store-keeper from Rupees 100 to Rupees 125 per month, but, on the other hand, the arrangement would admit of the services of two junior Clerks being dispensed with.

9. There are a few points connected with the Store-keeper's and Despatcher's duties which we would wish to notice before passing on to the other branches of the Office—

I. The contents of original cases of Stationery should be marked uniformly on each case, so as to be apparent at a glance when the cases are arranged on the forms.

II. The open stock should be arranged methodically according to classes of paper and other stores, and there should be Tally-boards indicating the description and quantity of each kind of stock, the issues, and the balance, which should be verified with the Stock Ledger.

III. There should be an annual stock-taking. This is done in Her Majesty's Stationery Office in London between the 1st and 7th April of every year, when no issues are made except on emergency, notice being sent to all the public Offices to abstain from indenting for stores whilst stock is being taken. We recommend that the rule be followed here.

IV. The Packing Clerks should check the stores set apart for despatch with the Delivery Notes, and then make out the Invoices, entering particulars of the latter in the Packing Registers, with notes of the date of demand, when registered in the packing room, when packed, when forwarded to Shipping, Railway, or Post Office Agent.

V. Before beginning to pack the Clerk should mark the cases with the rotation Number of the Indent or Delivery Notes, and then pack up the several articles, marking them off item by item with the Delivery Notes and Invoices, and placing the proper Invoice inside each case. By these expedients any discrepancies between the Delivery Notes, Invoices, and actual deliveries to Indenting Officers could be readily checked.

VI. All receipts as well as issues of Stationery and other stores should be recorded, after comparison with the Delivery Notes, in Day Books and Abstracts or rough Stock Ledgers. The Day Books should be in the form now used, but for alternate weeks, and on completion of the entries for each week should be passed on to the Account Branch for check with the Delivery Notes.

* It has not been thought necessary to publish the Tabular Appendices and enclosures.

10. The operations of the Account Branch commence with the receipt of the Delivery Notes after they have been complied with by the Store and Despatch Branches. The particulars of the Delivery Notes are entered in Day Books and Abstracts precisely similar in form to those used by the Store-keeper. They are then entered in rotation, and without classification, in the "Suspense Account," which in fact represents the total issues of each month.

Monthly Accounts. On the receipts of the Indenting Officers being obtained, the issues thus vouched are eliminated from the Suspense Account and transferred to another account, of which a copy is rendered, with vouchers, to the Deputy Auditor and Accountant-General.

11. The monthly accounts are then thrown into a series of annual Abstracts exhibiting quantities only. From these Abstracts others are prepared, in which the values are added to the issues for each Department, local Government, and Administration. Lastly, these several Abstracts develop the annual account of the operations of the Stationery Office rendered to the Deputy Auditor and Accountant-General for incorporation in the General Books.

12. This process involves much clerical labor without any real or effective check upon the issues. In the first place it is quite unnecessary that the Day Books and Abstracts prepared by the Store-keeper should a second time be prepared by the Account Branch. It would suffice if the Store-keeper's Day Books were forwarded, on the conclusion of each week, to the Account Branch, where (after verification with the Delivery Notes, Invoices, and Packing Registers) the issues should be entered in weekly totals in the Stock Ledger. Meanwhile the Invoices should be classified according to Departments, local Governments, and Administrations, and the particulars entered in a series of Abstracts corresponding with such classification, a column being left open for recording the acknowledgments of Indenting Officers.*

* The Suspense Account would be altogether obviated; any issues uncovered by the Indenting Officers' receipts would be apparent on the Abstracts, and necessarily lead to enquiry by the Superintendent of Stationery, or the Officer charged with the audit of his Accounts, who, under the present system, has no knowledge of, or control over, the suspense items.

The total issues of each kind of stock recorded in these Abstracts would then be brought together and proved with the Stock Ledger at the end of each month or quarter as may be determined upon, and the annual account would be developed and proved in the same way. The forms of Ledgers and Abstracts necessary for carrying out these operations have been approved by the Deputy Auditor and Accountant-General to the Government of Bengal. They have also been explained to the Account Branch of the Stationery Office, and we recommend that they be adopted from the 1st of

Number of Clerks may be reduced.

May next. The effect of the change will be a considerable reduction in the work of the Account Branch, admitting of the number of Clerks being reduced from seven to four.

13. In connection with the mode of keeping the accounts we have considered also the subject of an effective audit.

Suggestions for an effective audit of the accounts.

The Superintendent of Stationery now renders to the Deputy Auditor and Accountant-General a monthly account showing the issues of stationery, for which receipts have been obtained from the Indenting Officers. The check of the Deputy Auditor and Accountant-General consists in comparing the receipts with the recorded issues. Should it be considered necessary to continue to render monthly accounts to him, a copy of the Classified Abstracts mentioned in the preceding paragraph would answer the required purpose; but we are of opinion that the accounts cannot be thoroughly and efficiently audited without personal attendance at the Stationery Office, and access to all the original documents and books. The accounts of Her Majesty's Stationery Office are audited in this way by an Officer of the Audit Board, and there can be no doubt that the check on the original records of transactions must be far more effective than when exercised through copies of accounts prepared expressly for examination. We beg to propose, therefore, that the audit of the Stationery Accounts here be entrusted to an experienced Officer of the Deputy Auditor and Accountant-General's Office, (in addition to his regular duties,) and that he be required to visit the Stationery Office for the purpose at stated periods, to trace transactions through their several stages, to check the entries in the Stock Ledger with the results brought out in the Classified Abstracts, to insist upon every recorded issue being covered by the acknowledgments of the Indenting Officer, and finally to audit the annual account for incorporation in the Books of the Deputy Auditor and Accountant-General. An Accountant of moderate ability would easily accomplish the audit of a week's accounts in an hour, and if the Auditors be carefully selected and changed every two or three years, we may reasonably hope for more satisfactory results from their examination than from the manipulation of the Native Clerks who have now to deal with these accounts. The arrangement would render unnecessary the transmission of copies of the detailed accounts of issues to the Deputy Auditor and Accountant-General, in whose Office both the work and the Establishment might, in consequence, be reduced. In that case the Government would perhaps allow a moderate annual fee, not exceeding the amount saved by such reductions, as a remuneration to the Auditor.

14. The remaining branches of the Stationery Office, viz. the Store and Form Indent Branches, are more immediately connected with its external administration, and in dealing with them we shall be enabled to treat on all the points of enquiry suggested in the communication from the Financial Department.

15. The Store Indent Branch is perhaps the most important of all. It has to deal with requisitions for paper and other stores from every Government Office in the Bengal Presidency. Its check consists in a comparison of the Indents with the Indenting Officer's statement of his last supply, of the balance in hand, and of the strength of his Establishment, and with a fixed scale sanctioned by Government, which allows a certain quantity of stationery for every man on the Establishment per annum. We are clearly of opinion that the check is defective, and

Existing checks defective.

that the principle of regulating the supply of stationery by the number of Clerks on the Establishment is altogether fallacious, more especially considering that in some Offices the work consists rather in reviewing proceedings than in actual writing, and that in others the amount of writing is out of all proportion to the number of Clerks on the Establishment.

16. We would rather adopt the principle that the Superintendent should check the kinds and qualities, as well as the quantities, of stationery indented for—

I. By comparison of the stock consumed in each Office with the consumption in previous years and with the expenditure in kindred Offices.

II. By comparison with the amount of business done, whether in letters, accounts, or other returns.

III. With the number of Clerks using stationery, although that does not, of itself, afford a complete measure of the proper expenditure of stationery.

17. This will involve an important change in the practice of the Stationery Office, though not (as we believe) in its functions. The Superintendent is clearly expected to "check expenditure." He must either have the power and means to exercise that check effectively, or be reduced to the position of a mere custodian of stores, and no intermediate course could be satisfactory to himself, or to the Government. The duties of the Comptroller of Her Majesty's Stationery Office in London are prescribed in the Treasury Minute of 10th March 1848 in these terms—"My Lords desire that the Comptroller will scrutinize all demands, from whatever quarter they may come, and that he will decline to pass such articles as may appear to be unnecessary or extravagant." There is no reason why a similar rule should not hold good here, without offence to the Heads of public Departments, and with the same advantage to the State which attends its operation in England. Adopting this as the basis of the changes which we consider necessary for promoting the efficiency of the Office in controlling expenditure, we proceed to indicate more particularly the manner in which the Indents for stationery stores should be checked, in respect both to quality and quantity.

18. In considering the miscellaneous character of the stores supplied by the Stationery Office our attention has been drawn to the obvious unsuitability of one invariable form of Indent for the discrepant requirements of various classes of Offices. The work of Mofussil Offices, for example, differs essentially from that of the Presidency Offices, while, amongst the latter, differences also exist in respect of details which affect the expenditure of stationery. The form of Indent common to them all, moreover, offers free choice of the entire contents of the Stationery Office, and this doubtless has the effect of inducing demands which otherwise would not occur to the Clerks who usually prepare the Indents. We think it advisable, therefore, to limit the choice as the first step towards bringing down the demands to the actual wants of each Office,

and in this view we have framed separate forms of Indent for the Presidency and Mofussil Offices,* which we beg leave to submit for the approval of Government, (Enclosures II and C.)†

19. Before drawing out the forms, due enquiries were made respecting the substitution of machine-made foolscap for hand-laid papers, the larger and more expensive kinds of hand-laid papers, and the result, as regards the Presidency Offices, will be found in Enclosure D of this Report. The subject was noticed in the Report of the Civil Finance Commission dated 2nd March 1861, but without any appreciable result so far as can be judged from a comparison of the expenditure up to 1859-60 with the expenditure of the three succeeding years. The larger sizes of paper have heretofore been expended chiefly for accounts and other figured Returns, which, with few exceptions, can be prepared on foolscap. Indeed a very large proportion of the accounts is now printed. The rough drafts or printer's copies might therefore be prepared on common German paper, and the printing be done on good printing paper, thus avoiding altogether the use of hand-laid papers. The general adoption of printed or lithographed forms would tend to the same result, and in respect of forms not easily reducible to foolscap size, the printing double-foolscap paper of 28 or 30 lbs. would be found a cheap and efficient substitute. The Commissioners who are at present engaged in revising the forms of Accounts for the Public Works Department throughout India have promised that, as far as possible, the forms shall not exceed the size of foolscap. The replies of the Departments of Audit and Account, and indeed of most of the Departments with which we have been in communication, are equally favorable, and justify our expectations of a considerable decrease in this branch of expenditure. The difference between hand-laid papers and machine-made foolscap paper, in actual fitness for clerical work, is very slight, whilst the difference in cost is considerable. The average quantity and cost per annum of hand-laid papers issued in the last three years is as follows:—

	Quantity.	Rate.		Amount.
		Rs.	As. P.	Rs. As. P.
Imperial	151	41	1 7	6,208 15 1
Royal or Book	833	25	10 7	21,576 0 0
Medium or Consultation	801	19	2 7	15,348 5 8
Demy or General Letter	998	13	2 9	13,006 8 0
Total average per annum	2,777	Rs. 55,998 12 4		

The prices of machine-made foolscap and printing double foolscap (of which musters are attached, Enclosures E and F) are about nine and twelve shillings a ream respectively.

20. The proposed form of Indent, it will be observed, does not exclude the more expensive kinds of paper, but prescribes

* We have not thought it necessary to draw up forms for special classes of Offices, but they will readily suggest themselves. The Stationery Rules of 9th July 1862 prescribe a certain form for hospitals; special forms will also be required for Public Works Offices and for the Survey Department. On the subject of Drawing Paper for the last mentioned Department, we have received a Memorandum from Colonel Thwaites, which is deserving of attention, and which will be found in the Appendix.

† See note, paragraph 4.
NOTE.—It is due to Mr. Carter, the Superintendent of the Government Central Press, to state that his efforts have for sometime been directed to the substitution in public Offices of ordinary printing paper for the more expensive kinds of hand-laid, and that he has, in communication with the Heads of Offices, effected a considerable reduction of expenditure.

that every requisition for such shall be accompanied by a specification from the Indenting Officer of the objects for which they are required. The character and amount of business done in each Office, the number of employes, the balance of stores in hand at the period of the previous Indent, the supplies received on that Indent, the consumption during the past year, and the demand for the current year, are also to be specified so as to enable the Superintendent to check the kinds, as well as the quantities, of stationery indented for. In connection with these changes, we propose that the Superintendent should revise and modify the present scale and rules for the supply of paper and other stores in communication with the Heads of Central Offices and the Board of Revenue.

21. It is of course impossible for the Superintendent to check the expenditure of stationery of stores in the Offices receiving them. That must be left to the Heads of the Offices, but the following expedients for checking waste or pilfering are deserving of attention.

22. In England the check principally relied upon is the stamp of the Royal Arms on every sheet of paper issued by Her Majesty's Stationery Office. As all future supplies of paper for India are to be provided by that Office, there can be no difficulty in having them similarly stamped before despatch to this country. If a distinguishing water-mark were preferred, and we consider it preferable, that also might be arranged, without extra cost, by the Comptroller of Her Majesty's Stationery Office when making his next contracts for paper on account of the Government of India.

23. We have reason to believe that there is considerable waste of the more expensive kinds of paper in the manufacture, by dufturies, of envelopes and memorandum slips. The envelopes are unsightly and inconvenient, as well as expensive, and we would recommend that machine-made envelopes of cheap, but durable, paper be obtained from England. The Superintendent of Stationery should also be instructed to furnish memorandum slips with printed headings to Offices requiring them. We are of opinion that the practice should be discouraged of entrusting dufturies and subordinate Clerks with stationery stores in any form in which they could be made available for other than strictly official purposes. We would also recommend the adoption, as far as possible, of the expedients for economizing paper and writing, designed by Mr. Sandeman, the Civil Pay Master of Bengal. Patterns of these are herewith forwarded. (Enclosures G and H.)

24. It would tend to promote economy, as well as convenience, if the supplies on annual Indents were made to the Presidency Offices in quarterly or half-yearly instalments. Few Offices have proper store-room for the safe custody of large quantities of paper, or men to look closely after the issues, and it is obvious that the expenditure will be better controlled when the supplies are limited. The arrangement is already observed in the Office of the Board of Revenue, and should be generally adopted.

25. We would further suggest that each Indent should represent the probable expenditure of twelve complete months.

At present Indents are sent in anticipation of, or long after, the expiration of a year from the previous Indent according to the convenience of the Indenting Officer,—a practice which materially hinders the exercise of an efficient check by the Superintendent. We propose that Indenting Offices be divided into twelve lists under the headings of the twelve months, with reference to convenience of carriage, season, &c.; and that the Officers placed under each month be directed invariably to despatch their annual Indents on the first day of that month. In this way the pressure of business on the Stationery Office would be equalized throughout the year, and the supply of stationery to each Mofussil Office would be made at definite annual intervals.

26. We now come to the subject of the Indents for Mofussil Offices, of whose actual requirements two Members of the Committee have had personal experience, lately confirmed by detailed enquiries in Offices near Calcutta. The unanimous conclusion at which the Committee have arrived is that no paper of a larger or more expensive kind than foolscap need be provided at all to Mofussil Offices. The accounts and figured Statements for which these kinds of paper have heretofore been required are, for the most part, reducible to foolscap size, and where they cannot be so reduced, printed forms on double foolscap printing paper would serve the required purpose. The economical advantages of printed forms, and the manner in which their supply should be regulated, are noticed below.

27. The remaining work of the English Departments of Mofussil Offices might be done on machine-made foolscap and German paper, the use of the former being restricted to the record of judgments by the Heads of Offices and the fair copies of correspondence, while for drafting letters and accounts, and for taking down depositions, the German paper will suffice. These supplies should be provided by the Stationery Office with a margin, for wastage, of say ten per cent. for English foolscap, and fifteen per cent. for German paper.

28. A large proportion of the correspondence of Mofussil Offices, as, for example, letters stating a single fact, or asking a single question, might be expressed in memorandum form, in docket slips of one-fourth or one-eighth of a sheet of foolscap paper. Communications between Commissioners and Collectors, and between Magistrates and District Officers, could likewise in many cases be compressed in small docket slips, the latter being provided by the Stationery Office, as recommended in paragraph 23.

29. For the vernacular work of Mofussil Offices the common country paper obtained by local purchases will suffice, the cost being included in contingent bills as heretofore, or provided out of a fixed contract allowance, in accordance with an arrangement already in operation in the

Indents to represent the probable expenditure of twelve complete months.

Mofussil Indents.

Hand-laid papers of large size quite unnecessary.

Machine-made envelopes and memorandum slips to be provided by Stationery Office.

Uses of English foolscap and of German paper.

Docket slips.

Country paper for vernacular branch of Mofussil Offices, and petty stores, to be provided by a fixed contract allowance.

North-Western Provinces, and which it is proposed to extend to Mofussil Offices in Bengal. We would strongly recommend the early adoption of this proposal. The practicability as well as economy of the contract system has been proved in the North-West, and it is peculiarly adapted to the miscellaneous character of the expenditure heretofore included in the "Stationery Contingent Bills" of public Offices. The audit of the Stationery Office over such expenditure is only *pro forma*, and cannot, under any circumstances, be very efficient; a fixed contract allowance would give Heads of Offices a personal interest in keeping down expenditure, and obviate the necessity for the Bill Audit Branch of the Stationery Office, as already mentioned in paragraph 7 of this Report.

30. It remains to notice the miscellaneous stores provided by the Stationery Office. Blotting paper should be made up into pads instead of being furnished in loose sheets. Packing and colored paper, with other articles of occasional use, should be indented for only under special circumstances, to be fully explained.

Miscellaneous stores for Presidency and Mofussil Offices.

Binding materials.

Marble paper, paste boards, and mill boards, for binding, should be vouched by statements of the number and description of books to be bound each year. The general use of the bundling system would cause a reduction in the expenses of binding, and it is by far the most convenient form of keeping records. English-bound books are largely indented for.

English-bound books.

We see no necessity for their being all made of expensive paper, and in so many varieties of sizes. Nearly all, if not all, the Royal and medium books could be exchanged for books of foolscap size. The Bengallee Registers of deposits, for example, are on books of Royal paper, costing each six or seven Rupees. They might as well be kept on printed forms of good printing double foolscap paper made up into books in the Stationery Office. Books of hand-laid papers are likewise used for copying pension bills, pay abstracts, and the like; by the substitution of a register, entries extending over a page would be compressed into a line. A list of the number and kinds of books kept up in each Office should be furnished to the Superintendent of Stationery with the annual Indent, a comparison of these lists one with another would suggest useful checks upon the growing tendency of some Indian Offices to multiply records of unimportant details.

31. The issues should include a larger proportion of steel pens, and fewer quill pens, than are at present allowed. The annual allowance might be fixed at four dozen steel and two dozen quill pens, and four pencils for each man. A penknife should be allowed for every two men, and a hone for each Office. Wafers, paper-weights, candles, gum, and sealing wax should be provided by each Office out of the fixed contract allowance. It has been proposed to include in the contract allowance a sum for providing Clerks with pens, pencils, and penknives also, but such articles could not readily be purchased at all Mofussil Stations, and if they must necessarily be provided, in some cases, by the Stationery Office, it would be as well to maintain a stock sufficient for the requirements of all Departments, the latter as

Objections to a fixed money rate for providing pens, pencils, penknives, &c.

well as the Government having the benefit of wholesale prices.

32. The Indents for printed forms are received in a distinct branch of the Stationery Office, copied *in extenso* in Registers, and passed on to the Allipore Jail Press for execution. There is no check whatever upon the Indents, nor upon the proceedings of the Jail Press, which receives its paper from the Stationery Office and retains charge of the printed forms until issued on Indents.

Form Indents.

33. The consumption of stationery is necessarily affected more or less by the use of printed forms, and the Indents for both should be submitted and checked together. Apart from their economical advantages printed forms constitute an important adjunct in preserving uniformity and regularity in the proceedings of public Offices, but whilst their use should be encouraged as far as possible, it should also be duly regulated and controlled. With that view we beg to submit the following suggestions:—

I.—That the various Central Offices in Calcutta, and at the seats of Local Governments and Administrations, establish distinct forms for the Departments under their respective orders, each form to bear a distinguishing number, and patterns of all the forms to be lodged with the Superintendent of Stationery.

II.—That the forms be limited, as far as possible, to foolscap size. That for such as are intended for comparatively unimportant and transient use the common printing paper be employed, whilst for correspondence and the more important forms the best kind of printing paper be allowed. That English writing paper be issued to Printing and Lithographic Presses only under special circumstances to be fully explained in the Indents. That the Superintendent of Stationery, in communication with the Heads of Central Offices, have power to determine the qualities and sizes of paper adapted to the several kinds of forms, &c.

III.—That, as a general rule, the form printing be executed by one Central Press, on the requisition of the Superintendent of Stationery each requisition being accompanied with the proper supply of paper. That, on good cause being shown, forms of a special character be printed at other Presses, the paper being supplied, as above, by the Stationery Office.

IV.—That the Superintendent of Stationery have the sole custody of all printed forms, regulating from time to time the quantities of the several kinds of forms to be kept in store.

V.—That all Indents for forms be checked by the Superintendent with reference to the amount of business done in each Office, the quantity expended and in balance, and the annual consumption in cognate Offices.

34. The adoption of these rules would give the Superintendent of Stationery a direct control over the expenditure of paper in public Offices, as well as in the Government Printing Establishments. We think it desirable that the latter should be placed under some sort of control. The Allipore Jail Press, for example, received from the Stationery Office during the past year paper to the value of nearly seventeen thousand

The Allipore Jail Press.

Rupees, including hand-laid paper to the value of upwards of ten thousand Rupees. The paper was obtained on simple requisitions, was used up in printed forms and other Returns, which were retained in the Press until issued in detail to public Offices. No account of expenditure was ever rendered to the Superintendent of Stationery, nor was there any check outside the Press over its proceedings. On a recent occasion, when visiting the Press, the Superintendent of Stationery casually discovered that 25,000 envelopes required by the Indenting Officer to be prepared on German paper had been made up of hand-laid English demy, four envelopes to the sheet. The difference between the cost of the two kinds of paper is ten Rupees a ream, so that the loss to Government on this single transaction was just one hundred and thirty Rupees. This, possibly, may have been owing to accident or oversight, but it serves to illustrate the necessity of bringing the paper expenditure of Government Printing Establishments under control. According to the rules we have proposed the Allipore Jail Press will keep no stock of paper or printed forms; it will print in bulk on the orders of the Superintendent of Stationery, receiving with each order the kind and quantity of paper necessary for its execution, a fair margin being allowed for wastage. The check in this case would be simple and complete.

35. A similar course could not well be followed in regard to Presses engaged in printing correspondence, proceedings, and work of a special character, but the Indents for paper on account of such work would come under the rules and checks proposed in paragraph 33 of this Report. It is

Suggestion for a special audit of the Accounts of Government Printing Establishments.

worthy of consideration whether the expenditure should not be subject to a special audit, as recommended in paragraph 13 for the accounts of the Stationery Office. Practically, at present, there is no check upon the growing expenditure of the Government Printing Offices, and the employment of an Auditor to check the Books at frequent intervals would be beneficial. He would, in the first instance, see that the cash expenditure was duly authorized and vouched. He would require the Paper Stock supplied by the Superintendent of Stationery to be brought on charge, and then check the expenditure with the printed matter issued and in balance. Besides checking the accounts any intelligent practical Accountant, in the position of Auditor, would be enabled to offer suggestions for reducing the quantity of printed matter, simplifying and consolidating official forms, and otherwise promoting economy. On all these grounds we commend the appointment of an Auditor, with a moderate annual fee, to the favorable consideration of Government.

36. Having thus pointed out the inefficiency of the existing checks, and the measures requisite for an effective control over the expenditure of

Proposed changes in the Store and Form Indent Branches of Stationery Office.

Stationery, it only remains to determine the corresponding changes in the Establishment of the Stationery Office. The work now done by the Indent Branch is purely mechanical, and of scarcely any practical value. Were it to continue on its present footing no change would be required in the Establishment, nor would it be necessary to

employ a Head Assistant, as the general supervision of the Office might in that case be shared by the Superintendent with his Deputy, whose duties in the Stamp Department, though responsible, are not very arduous. But as the Government have resolved that the Stamp and Stationery Offices should be kept entirely distinct, and as the application of the checks we have proposed must greatly increase the extent and importance of the work of the Indent Branch of the Stationery Office, we are of opinion that the Establishment of that Branch should be entirely recast on an improved scale of pay, so as to attract a better class of Clerks than are at present obtainable for the work. And as the efficiency of such an Establishment must depend mainly on despatch and accuracy, which can only be secured by constant and intelligent supervision, we consider that it would be for the advantage of the public interests to sanction the permanent employment of a European Head Assistant. It should be his especial duty to instruct and direct the Establishment employed in checking Indents, and he should himself scrutinize every Indent, without prejudice, however, to the general supervision which he is required to exercise over the whole Office. We have prepared forms of numerical and classified Registers, Stock Ledger, and Abstracts (Enclosures I to L) which will be found very useful as Office records for checking the Indents and accounts, and for statistical purposes. The classified Registers will exhibit the supplies of all kinds to every class of Office, and to every Office in each class for a series of years, and no doubt other practical details will suggest themselves in the course of business, tending to the establishment of an equally efficient check as is now exercised by the well ordered Establishments of Her Majesty's Stationery Office in London. The changes we have proposed will involve some increase of expense in the Indent Branch, but we are convinced that the savings to be expected from its efficient administration will far exceed the entire cost of the Calcutta Stationery Office.

37. We submit in the Appendix a schedule of the present and proposed Establishments of the Stationery Office. (Appendix M.) Our proposals involve an increase in some cases, and a decrease of expense in others, but the net result is a saving as compared with the present cost of the Establishment:—

Total monthly cost at present... Rs. 1,134
Proposed (minimum) Rs. 914,
(maximum) Rs. 1,194 (mean) „ 1,054

The scale has been prepared after careful enquiry into all the business details of the Office, and the Superintendent of Stationery is prepared to carry it out as soon as sanctioned. The two extra Clerks are wanted for counting water-marked paper before issue to the Stamp Department. This is a necessary precaution, and the work requires the services of two men; but if the water-marked paper were sent out from England by tale instead of weight, in even reams of four hundred and eighty sheets, it would not perhaps be necessary to count the issues to the Stamp Department, or retain the extra Clerks.

MEMORANDUM.

38. The measures we have proposed for diminishing expenditure, and substituting cheap but good paper for the hand-made papers heretofore so largely used, involve also a decrease in the quantity and value of the Reserve Stock. The Superintendent of Stationery will duly consider this when preparing his next Indent for stores from England. As a further guide in the preparation of the Indents the Superintendent should receive annually from the Comptroller of Her Majesty's Stationery Office in London specimens of every kind of paper obtainable for official purposes, each specimen being marked with a distinguishing number, and its price. In proposing the substitution of cheap for expensive paper it is very far from our object to introduce inferior articles unsuitable for official purposes. Recent improvements in the manufacture of paper, and the active competition prevailing in the English and Foreign markets, admit of our proposals being carried into effect without any detriment to the Public Service, and of this the Government will be able to judge from the specimens of paper forwarded with this Report.

39. In conclusion, we have to express our acknowledgments to the Heads of Offices with whom we have been in communication for their ready co-operation in the objects of our enquiry. During its progress we were favored by Mr. Jones (the Registrar of the Bengal Office) with an useful printed Memorandum, which will be found among the enclosures of this Report. Mr. Jones suggests, in the first place,

that the Paper Stock should be separated from other stores, because a similar division exists in Her Majesty's Stationery Office in London. The arrangement, however necessary and convenient in an Office of such extent, is not required here; on the contrary, our observations have led us to propose the immediate amalgamation of the Store and Despatch Branches. Mr. Jones' suggestion for modifying the forms of Indents had been anticipated and fully discussed at our first meeting. In preference to his plan of stamping every sheet of paper with the Royal Arms, as well as the designation and localé of the Officers receiving the supplies, we have recommended (in paragraph 22) that the paper be sent out from England, with the Royal Arms or other device, in water-mark. The rest of Mr. Jones' suggestions about the Government Printing Establishments are disposed of in paragraphs 33 to 35 of this Report.

We have the honor to be,

SIR,

Your most Obedient Servants,

T. BRUCE LANE,
Junior Secy., Board of Revenue.

W. L. HEeley,
Offg. Supdt., Stationery.

GEO. W. KELLNER,
Assistant Accountant-General,
Public Works Department.

THE orders having issued to the Committee appointed to report upon the Government Stationery Office, I hope I shall be excused for taking the liberty of offering a few suggestions, based chiefly on recent observations in Her Majesty's Stationery Office in London. The operations of the two Departments being the same in character, it at once suggests itself whether the comprehensive System in force in H. M.'s Stationery Office should not be followed in its entirety, the Superintendent being vested with authority for controlling Indents, and restricting the expenditure of Paper used for Printing and other purposes.

The bulk of the expenditure on Government Stationery being represented by the Paper Stock, it is important to observe a practical distinction between that division and the routine connected with Small Stores, such as Inkstands, Ruler, Tape, &c. This arrangement forms the basis of the System in the London Office, and in Calcutta it would enable the Superintendent to take the Paper and Printing Branch under his exclusive personal superintendence,—a desideratum which is hardly practicable so long as Indents are sent in upon a catalogue of the entire contents of the Government Stationery Store. In H. M.'s Office a separate Form is employed for each of its two Departments, ["Paper and Forms" and "Small Stores,"] and the facilities afforded for controlling Indents will be apparent from the columns left blank for the purposes of the Controller's Office. Against the several descriptions of articles are noted the quality and quantity of the Paper (*Form A*) or other Stores (*Form B*) which, in the discretion of the Controller, should meet the demand, the last column showing the number in the "Register." In the latter a general record of all demands is kept (*Forms C and D*) separately for the two Departments of Indent, and the last three columns show the immediate action taken, whether by supply from store or by order on a Manufacturer: as connected with such orders the Form of Contract Book (*Form E*) shows the relations between the Stationery Office and the Contractor; such a record, however, would only be needed in India for occasional requirements of Small Stores obtained from the local market.

On the completion of an Indent, or without waiting for any portion in the hands of a Printer or Manufacturer, the articles are forwarded with a receipt (*Forms F and G*), also framed separately for each Department of Indent. It will be seen that modified Forms (*Forms H 1, 2, 3, 4, 5*) are framed for Offices the demands of which are restricted to certain descriptions of Stationery, the latter being printed on the face of the Forms.

As indicated by the practice last adverted to, the first step towards a practical control of Indents would be the fixing of the requirements of Indenting Officers, with reference specially to the employment of cheaper substitutes for the existing supplies, as well as of various expedients for economizing Paper and Printing which only require to be more generally resorted to. The purpose in view, it is submitted, could be easily accomplished in the case of every Indenting Officer, the articles in demand being most probably identical in all Offices of a like character.

An inspection of the correspondence and Forms in use in different Offices at or near the Presidency would afford the Superintendent a thorough insight into the scope and purposes of all the regular demands; Commissioners, Magistrates, Collectors and others would co-operate with him in arriving at the most economical method of fixing their respective requirements, and the acquiescence of Officers at a distance might be obtained by means of a Circular forwarding musters of the several descriptions of Paper, Forms, and other articles agreed to as above by one or more Officers in personal communication with the Superintendent.

On the restrictions being generally understood, separate Forms of Indent for the several classes of Offices might be introduced with advantage, but as a modification, if not an improvement upon the system at home, the Indent would only require an additional column, for the Indenting Officer's acknowledgment or remarks, to serve the purpose of a Receipt; the address of the Superintendent of Stationery should be printed on the back of the Form, which would thus become, for the combined purposes of Indent and Receipt, a permanent check upon the Store-keeper's Registry in the Stationery Office. In the latter Branch it is essential that the Store-keeper's Warehouse Journal and Index should be posted up daily, delay or arrears leading to confusion and uncertainty as regards the quantity and duration of the multifarious classes of Paper, Forms, and Small Stores available in the Office. For all the Stores in the Paper Godown, the precise quantity in store and expended, with a register of the date of receipt and issue of any portion thereof, should be entered on tally boards to be affixed in front of the several classes of Paper. This expedient is found invaluable at home, and one of the boards from the Controller's Warehouse (*Form I*) displays the utility of the check.

To return to the point of controlling expenditure,—the Authorities in England attribute to the plan of stamping all the Paper issued from the Stationery Office the most effective of all their checks against the unauthorized appropriation and waste that obtains certainly to no small extent in India. In the Office at Westminster two small Stamping Presses (costing about £5 each) produce an impression of the Royal Arms on every sheet of the vast stores of Writing-Paper issued to all Departments of the State. With a single Press worked by a Duffury on 8 or 9 Rupees a month, the Office here need be in no degree behind the age; on the contrary, the plan might be rendered still more efficacious by the use of Stamps giving the local designations of Officers. The cost of the complete Dies would be £13-16 per dozen, (*vide* letter from the Die Cutter employed by the Controller's Office,) but the expense might be lessened by having a single Die for each classification of Officers, with a movable piece for the names of Stations.

But independent of the Stamping process, or in addition to it, there seems no reason why all Paper used for purposes of correspondence should not be furnished with a printed superscription for every Indenting Officer; thus:—

No. *

From the Magistrate and Collector of Balasore,
To

Dated the 186

Sir,

The plan here suggested would be a most effective check, independent of other recommendations manifest upon the face of it. Of course plain Paper would also continue to be supplied as at present, for letters extending to several sheets, but the Royal Arms might without inconvenience be stamped on every sheet issued. The adoption of printed headings, however, would favor the more general use of inexpensive Paper and docket-slips, to the saving a large amount of Foolscap and Quarto-post.

In England the Stationery Office furnishes the various Departments of Government with the different descriptions of blank Register Books, Indexes, &c., which in India are made up by Office for themselves, and for which extra Duties are sometimes found necessary. Specimen sheets of such Books accompany this Memorandum, and the like utilization of the Calcutta Stationery Office, if it did not tend to much economy, would at least enhance its efficiency.

As connected with the reforms now under consideration, I notice the subject of printed Forms because the Government Stationery Office is now the recognized Office of supply, but as with other divisions of the Paper expenditure, there is no check. The transfer, however, of two or three Clerks from the Jail Press Office would, without involving increased expense, bring the entire Paper consumption at the Jail Press under the constant control of the Superintendent. To indicate the cheapest description of Paper suited to the Forms indented for would not occupy ten minutes daily of the Superintendent's time, especially when the requirements of Officers are placed upon a fixed and permanent scale. It is therefore suggested that the Paper used for Printing, instead of being supplied to the Jail Press, and other Printing Establishments, *ad libitum*, as at present should be forwarded daily with a Demand Statement, accompanied by a copy of each of the Forms entered in it. The same plan works without the least irregularity in H. M.'s Stationery Office, where in point of magnitude and variety the demands defy any sort of comparison with the Form Printing at Alipore. A filled-up Demand Statement, with the several Forms embraced in it, is annexed, and shows the mode in which the calculation is made for the Paper supplied to the Printer. Taking for instance, the 1st, 2nd, and 3rd items it will be found, on comparing them with the printed Forms, that—

15 sheets of Post give 50 copies, with 2½ sheets for wastage.

4 quires 8 sheets of Foolscap give 100 copies, with 4 sheets for wastage.

3 reams 3 sheets of Foolscap give 3 reams, with 3 sheets for wastage.

The absence of any system of check on the supplies to Indenting Offices is not the gravest defect of the Department as a controlling authority; I trust I am not outstepping the bounds of the position I have assumed in advancing this Statement, and in inviting attention to the unrestricted consumption and waste of Paper in Government Printing purposes unconnected with the Jail Press. Thousands of reams, of all descriptions, have been furnished to private Printers without any return or calculation whatever of the expenditure, and the same practice prevails to this day, the Godown-keeper exercising all the functions of Superintendent of Stationery save only the correspondence occasionally arising out of such Indents.

The Committee will probably inspect the Stationery now used for Lithographing, and they will readily discover the saving to be effected by using a substitute, alike cheaper and more appropriate, for the valuable Paper now consumed upon the larger descriptions of Forms. The lithographed Statements belonging to the accompanying volume of Proceedings are printed upon paper worth 35s. per ream; Paper more ill-adapted for the work could not have been chosen, and as Royal 26lb Paper at 10s. 6d. per ream would be more suitable, though not cheaper, than any other, an idea can readily be formed of the saving likely to follow a reform of the existing state of things.

Having briefly noticed the Supplying and Controlling functions of the Department, I would offer a concluding suggestion with reference to the important subject of its own Indents upon England. The principle of indenting upon H. M.'s Stationery Office for the whole of the Paper Stores has already asserted a great financial reform; it remains, however, to some extent to know what to indent for. The want of descriptive detail in Indian Demands is a constant source of perplexity and complaint at Westminster, and the apprehension of giving dissatisfaction probably tends to the purchasing of more expensive classes of Paper than would otherwise answer. I obtained therefore from the Controller's Office the accompanying collection of Musters of all the cheaper descriptions of Paper, of various classes, with the prices at which they are obtained on contract marked on each; it would be desirable to forward a requisition to England for a similar file of musters and prices, to be sent out annually, as it would always guide the Superintendent in making the most economical and suitable selection for the purposes of his Indents.

I subjoin a Statement, given to me in London, showing the quantities of the various descriptions of Paper on Indent in October last for the three Presidencies, the Bengal portion alone aggregating 36,300 reams. It will be observed that the Indents for Madras and Bombay are, especially in respect of Printing Paper, very small, whilst those for this Presidency are enormous, and it occurs to me that if some portions of the latter could be diverted without inconvenience to the other Presidencies, it might obviate their having recourse to the local market in the event of their stock of Paper falling short. Timely arrangements could also be made, if necessary, for supplying Bengal with Paper selected from the musters herewith submitted.

I have not touched upon the Accounts of the Office, as they are separate from the measures of economy more immediately in hand. It is worthy of suggestion, however, that every Indenting Officer should be debited in future with the value of the Stationery expended by him, and further, that such expenditure should be regularly brought under the cognizance of the Government. The influence of an Annual Report, and the authoritative action of Government on the recommendations submitted in it, would greatly enhance the Superintendent's control: the latter, no longer hampered with the business formerly connected with local tenders and contracts, would have ample leisure for prosecuting measures of economy, and a periodical exposition of the working of his Department would show whether its expenditure had been reduced to a minimum.

THOMAS JONES,

Registrar, Bengal Secretariat.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, AUGUST 31, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

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Report on the Administration of the Tributary Mehals on the South- West Frontier for the year 1863-64.

From LIEUTENANT-COLONEL E. T. DALTON, Commissioner of Chota Nagpore, to S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal,—(No. 983, dated the 3rd June 1864.)

WITH reference to your letter No. 1644 of the 1st April last, calling on me to submit my Political Report in time to be incorporated with the Annual Administration Report of the Government for the year 1863-64, I have the honor to submit a Report on the administration of justice in the Tributary Mehals for the year ending 31st December last, with a fiscal Statement for Fuslee year 1270 ending September, with a further Statement of crime reported from the 1st of May 1862 to the end of that year.

2. Not having been able to visit any of the Political Estates in 1862-63 I abstained from submitting a Report for that year, intending to do so after my last season's tour; but having now the material for completing the Criminal and Civil Statements to the end of the year 1863, it occurred to me it would be best to prepare them up to the close of that year and to continue so to give them in future. The Statements, Criminal and Civil, will thus be assimilated to those sent in from the Districts under the Courts of Law, and the Report will be framed shortly after the completion of the tour when the impressions received during it are fresh. It will, moreover, show better results in regard to the time fixed for the realization of the revenue from the Estates which is regulated by the Fuslee year ending in September, and it will enable me to place the Reports in your hands by the time

that it appears you are desirous of receiving them, for if I were to wait till the Returns from the Political Estates for the month of April were complete I should not be able to furnish a Report till June or July.

3. As I have adopted the classification of offences given in the Penal and Criminal Procedure Codes, and framed the Statements in conformity with the orders issued from your Office for the preparation of the Police Reports, I am unable, on this occasion, to fill up the columns intended to show comparative results.

4. During the past year the Rules framed for the guidance of the Chiefs in the administration of Criminal justice were, under the authority of your Office letter No. 4377, dated 31st August 1863, duly promulgated. During my tour I carefully explained their nature to the Chiefs, and they are now understood and acted on and appear to be generally approved.

5. The Chiefs appear glad to have their powers authoritatively defined, and no objections are made to the restrictions imposed or to the modifications of the former practice that have been introduced. The most important of these is that, in cases committed to my Court, the witnesses as well as the prisoners are sent in, and the trial held as nearly as possible in conformity with the Rules in the Criminal Procedure Code, and some cases which the Rajahs were in the habit of trying themselves they are now obliged to commit. Their proceedings now come more frequently before me than was the case in former years, and in the care and attention bestowed in their preparation I observe generally great improvement. During my tour I took up several cases and held the trials in the presence of the Chiefs, taking the opportunity of pointing out to them how they should be conducted.

6. Last cold season I visited Bonai, Gangpore, Jushpore, Odeypore, and Sirgoojah, making

eighty-seven marches, and travelling about 870 miles. I will give the result of my inspection of the different Estates in my Report upon each. Korea and Chang Bhukhar I did not visit, but the Chief of the latter and the Dewan of the Ranee of Korea came to my camp in Sirgoojah and I held a Sessions for Korea there.

7. SIRGOOJAH AND ODEYPORÉ.—Statements of crime for these Estates are given together as they are both under the management of Rajah Bindheshuree Pershad Singh Deo Bahadoor as Rajah of Odeypore and Surburahkar of Sirgoojah.

8. The area of Odeypore is about 1,600 square miles, and Sirgoojah about 3,890, and the population of both has been estimated at 1,25,638 souls; but as neither of these Estates have as yet come under the operations of the survey these figures, especially in regard to area, cannot be depended on. The boundaries of the Estates are not correctly given in any published Map.

9. In Odeypore the Rajah has a Thannah and small Establishment at Rakkobe, where Reports of crime are made by the jaghirdars and farmers of villages. My visit to Odeypore of last cold season was the first I had paid to it since, under the orders of Government noted in the margin, it was made over to Rajah Bindheshuree Pershad Singh Deo Bahadoor. I entered it from Jushpore, was immediately joined by the Rajah, travelled through it to Rakkobe, which is about in its centre, and then by another route proceeded to Sirgoojah. All the heads of villages, jaghirdars, and the principal ryots from all parts of Odeypore visited my camp, so I saw a good deal both of the country and the people.

10. I found the latter somewhat reserved in their communication, but no complaints were made against the Rajah's management, and the people appeared well-to-do and contented. Finding but one weekly market established in Odeypore, at Dukri, twenty-four miles due south of Rakkobe, I opened another at the latter village, which promises to be successful. The exports are lac, cotton, resin, oilseeds, rice, wild arrowroot, iron, and a small quantity of gold.

11. I entered Sirgoojah by the Matinga Ghaut and passed through the Estate of Lall Muheshuree Pershad Singh, a cousin of the Rajah, and till within the last three years a Ward in the Political Department. I was glad to find that in his management of his Estates since their release he had not deviated from the system introduced when they were under Government management, and though the property has not much improved from the want of population, it has not deteriorated.

12. I proceeded next to Bistrampore, where the Dowager Maharanee, widow of the late Maharajah Uramer Singh, her son, the insane Maharajah Inderjeet Singh, and his wives reside, and had interviews with all of them.

13. In my letter No. 817, dated 29th June 1861, I reported that the Dowager Maharanee had written to me to say that the younger of the two wives of the insane Maharajah was *enceinte*. On the 24th July 1861 I was informed that she had given birth to a son and heir. To this child I

was now introduced; he is three years old and a remarkably fine and intelligent boy for his age.

14. The advent of this child was unexpected as the reputed father has been mad from his accession in 1851; indeed I am informed he was quite insane when the marriage between him and the mother of the child was brought about. During my stay at Bistrampore I saw him repeatedly and never observed the slightest indication of even a temporary return to soundness of mind, for, though he appeared to recognize people and to be generally docile, his talk was all mad nonsense, and he was ever flighty and restless. However, the child was now before me an accomplished fact acknowledged by the principal members of the Sirgoojah family who were then present, Lall Jyepal Singh and Lall Muheshuree Pershad Singh, and not openly repudiated by Rajah Bindheshuree Pershad Singh.

15. The mother of this boy is represented as again *enceinte*; this is to be deplored; the offspring of such a union if legitimate will, it is to be feared, inherit and transmit the taint, and already in the families of the Chiefs of the Tributary Mehals and other Estates of Chota Nagpore we have a sad amount of insanity or imbecility. The Rajahs of Bonai and Korea are insane; the latter had no children by his first wife, and the marriage which the second was brought about after his insanity was known, and the only child is the offspring of this second marriage and appears of weak intellect. The Rajah of Dhunwar, in Khurruokdiha, for many years reported imbecile and incapable of managing his Estates, having no children surviving, has recently been married to an adult girl.

16. I had informed the Rajah Bindheshuree Pershad Singh Deo that I should have to make arrangements regarding the child at Bistrampore, and told him it was desirable that he should be present; but, expressing his willingness to abide by any decision in regard to the family that I should pronounce, he excused himself from remaining with me at this juncture on the plea of severe illness in his family, and desiring, he said, to go to Pertappore in advance to make arrangements for my reception. The Dowager Maharanee in her interviews with me made many demands. She objected to her step-son, Bindheshuree Pershad, as Surburahkar, and requested that the management of the Estate might be transferred to her, and she claimed the usual appanage for her grandson as Jooobraj.

17. The first demand I refused to comply with; in regard to the second I took into my council Lall Jyepal Singh, the oldest member of the family, an admirable specimen of a Native country gentleman, and at his recommendation agreed to place at the disposal of the Maharanee as guardian for the maintenance of her grandson the collections from the lands noted in the margin, estimated to give a net rent of Rupees 1,375. This was less than the allowance made to the last Jooobraj in the family.

18. In addition to this a grant of Rupees 1,000 from the revenue of Sirgoojah was made as part of the expense of repairs and necessary additions to the Maharajah's residence.

	Rs.	As.	P.	
Tuppah Loondrah worth	374	8	0	
" Rajkhetta "	1,000	0	0	

	Ra.	As.	P.	
Maharajah's maintenance per annum	8,600	0	0	
House repairs	1,000	0	0	
Pay of Mohafiz	360	0	0	
Lands given to the Joooraj worth	1,375	0	0	
Total Rupees	8,335	0	0	

pees 5,000 per annum.

20. The sum appears ample for the maintenance of the family in comfort and respectability, and it is as much as the Sirgoojah revenues will bear.

21. I have not considered it necessary at present to make or propose any alterations in the arrangements for the management of the Estate or the guardianship of the disqualified Maharajah. The Dowager Maharanee can continue to act as head guardian to the Maharajah, and be guardian also to the infant son, assisted by Baboo Gungah Singh, formerly Manager of the Estate of Lall Muheshuree Pershad Singh Deo, a man of probity, intelligence, and influence, and a very old servitor of the family, and Rajah Bindheshuree Pershad Singh, notwithstanding his step-mother's objections, is the best person to have at the head of affairs till necessarily superseded. I deemed it expedient, however, to adopt measures to enable me to exercise a stricter superintendence over the expenditure than was considered necessary when the Rajah was regarded as next in succession, and obtained details of receipts and disbursements for the last four years. Owing to the large expenditure for the Bismampore Establishment the annual surplus is inconsiderable. I called for an estimate for the current year, the probable receipts are given at Rupees 20,168, the expenditure at Rupees 18,184, so that the surplus amounts to Rupees 1,979 only.

22. Having made all necessary arrangements at Bismampore I proceeded to Pertappore, the residence of Rajah Bindheshuree Pershad Singh, and now the Sudder Station of Sirgoojah, and found an annual fair going on there, which was well attended. These annual fairs are held in different parts of Sirgoojah, and are all the people have to look to as substitutes for emporia for trade, for there are no bazars, and though weekly markets have been established, they are not much resorted to by strangers or wealthy traders. I found the Station of Pertappore greatly improved, the residence of the Rajah has been enlarged and adorned, and has now an imposing appearance. He has built a bungalow for the accommodation of gentlemen visiting Pertappore, and it is the terminus of several newly constructed roads planted on both sides with trees, which give it a civilized appearance, but the population of the town and environs do not appear to increase. The bazar had a deserted appearance, which was ascribed to a recent severe visitation of epidemic cholera. In conformity with the provisions in Section 16 of the new Rules the Rajah holds his Cutcherry in a suitable building constructed for the purpose outside the walls of his private residence and open to all.

23. The Jail buildings are sufficiently commodious and secure, but an hospital for sick prisoners had not been provided as previously

ordered. This will be immediately remedied. I found fourteen prisoners in Jail, and, as usual, in their presence examined the Register showing the offences of which they had been convicted and the term of the imprisonment. Only one man objected at all to his sentence. The clothing offered appeared sufficient, but they complained that the food given was not so, and I revised the scale. The whole expenses of the Jail for the Fuslee year 1270 were entered as Rupees 733-11.

24. The mortality during the year 1863 has been very great, ten deaths to fifty-four prisoners, but seven or eight of these deaths were from epidemic cholera which raged in July last, when it is said that upwards of 200 died in the Village of Pertappore including some of the Rajah's household; the other deaths are reported to have occurred from bowel complaints, which are more prevalent than fever.

25. It appeared that during the year 1863 no less than eight prisoners effected their escape, and from May to the end of 1863 seven, most of whom got off when employed on the roads at a distance from the Jail. I prohibited their being so employed again, and directed the Rajah to make better arrangements for the custody of prisoners in future.

26. Under Sections 4 and 5 of the Rules for the administration of Criminal justice in the Tributary Mchals the following Ellaquadars and Thannahdars have been vested with powers as Police Officers:—

Zemindars.

- 1 Lall Jyepal Singh Deo.
- 1 Bhuya Futteli Narain Singh.
- 1 Lall Muheshuree Pershad Singh Deo.
- 1 Thakoor Judoobur Singh.
- 1 Dewan Dripnath Sahce.
- 1 Lall Ghunsum Singh.
- 1 Dowager Maharanee.
- 1 Dewan Rundheer Singh.

Paid Police.

- 1 Uchumbhit, Tuhseeldar of Mungurpore.
- 1 Sunman Singh, Tuhseeldar of Tuppah Pal.
- 1 Gunput Singh, Tuhseeldar of Koosmi.

27. The marginal Statement shows the number of Civil cases instituted and disposed of in 1863. I found the business of this Department was being conducted in rather a dilatory manner. Cases in which plaintiffs or defendants had defaulted were kept on the files unnecessarily from a dislike apparently on the part of the Rajah to give *ex parte* decisions. The proper way of disposing of such cases was pointed out to the Rajah.

28. I observed also that the Rajah was not always so prompt as he should be in giving redress in Criminal cases. The value of the time of poor prosecutors and witnesses was not sufficiently appreciated by him, but he has promised that I shall not again have occasion to find fault with him on this account. It indicates progress to find the Rajah's Records and Registers in such order as enabled me at a glance to detect these defects in his administration.

29. The subjoined Statements give in one view the details of offences committed in Sirgoojah and Odeypore under the different classes in the year 1863 and for eight months from 1st May to the end of 1862.

From May to December 1862.

DETAIL OF OFFENCES.		MAY TO DECEMBER 1862.		NUMBER OF PERSONS UNDER TRIAL.		CONVICTED.		ACQUITTED, DISCHARGED, OR RELEASED ON BAIL.		PENDING ON 31st DEC. 1862.		DIED.		ESCAPED.		TRANSFERRED.	
		Cases.	Persons.	Pending on 1st May 1862.	Arrested during the eight months.	Total.	Government.	Commissioner.	Rajah.	Government.	Commissioner.	Rajah.	Police.	Pending on 31st Dec. 1862.	Died.	Escaped.	Transferred.
Class XI.—Offences affecting the human body.	1 Murder ...	3	2	...	3	2	...	2	...	...	...	...	...	...	...	...	...
	2 Culpable homicide ...	1	1	...	1	1	...	1	...	...	...	...	...	...	...	...	...
	3 Causing miscarriage, other cases ...	1	1	...	1	1	...	...	...	...	...	...	1	...	...	...	...
	4 Kidnapping or forcible abduction, other cases ...	1	1	...	1	1	...	...	...	...	1	...	...	...	...	...	...
	5 Hurt, other cases ...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	6 Criminal force or assault ...	6	12	...	12	12	...	...	7	...	...	5	...	...	...	...	...
Total		13	18	...	17	17	...	3	7	...	1	6	...	...	...	...	...
Class XII.—Offences against property.	1 Theft, other cases ...	8	15	...	11	11	...	...	11	...	...	...	...	...	...	...	...
	2 Attempt at ditto ...	2	3	...	3	3	...	...	3	...	...	...	...	...	...	...	...
	3 Extortion, other cases ...	4	4	...	3	3	...	...	3	...	...	...	...	...	...	...	...
	4 Receiving or habitually dealing in stolen property ...	3	3	...	3	3	...	...	3	...	...	...	...	...	...	...	...
	5 Criminal trespass, other cases ...	1	4	...	4	4	...	...	...	...	...	4	...	...	...	...	...
	6 Criminal misappropriation of property ...	3	7	...	7	7	...	...	3	...	...	4	...	...	...	...	...
Total		21	36	...	31	31	...	...	23	...	...	8	...	...	...	...	...
Class XIII.—Offences relating to documents, &c.	1 Forgery or uttering or possessing forged documents or papers ...	...	...	...	3	3	...	3	...	...	...	...	...	...	...	...	...
	Total	...	...	...	3	3	...	3	...	...	...	...	...	...	...	...	...
Class XVIII.—Miscellaneous offences.	1 Act IV. of 1840, breach of ...	1	1	...	1	1	...	...	...	...	...	1	...	...	...	...	...
	2 Neglect of duty in Jail servants ...	1	1	...	1	1	...	...	1	...	...	...	...	...	...	...	...
	3 Bad livelihood ...	...	...	...	2	2	...	...	...	...	1	...	...	...	1	...	...
	4 Neglect of duty in Kotewars ...	1	1	...	1	1	...	...	1	...	...	...	...	...	...	...	...
Total		3	3	...	3	3	...	...	2	...	...	1	1	...	1	...	...

30. In the cases under Class XI. for the last eight months in 1862 there is not much to notice. There were three cases of murder; in one the prisoner had a quarrel with his son and killed him with an axe; in the second the prisoner killed his wife under similar circumstances; they were tried and convicted by Major Verner and sentenced to transportation. In the third case the prisoner was not captured till 1863.

Total amount of Property plundered in House trespass and Theft.	Value of Property plundered in all cases reported.	Value of Property recovered.	Percentage of recovery.
	Rs. As. P.	Rs. As. P.	Rs. As. P.
House trespass with intent to commit theft	66 10 0	0 0 0	0 0 0
Theft	230 10 0	40 2 0	17 11 11

From January to December 1863.

DETAIL OF OFFENCES.		1863.		NUMBER OF PERSONS UNDER TRIAL.			CONVICTED.		ACQUITTED, DISCHARGED, OR RELEASED ON BAIL.			1863.					
		Cases.	Persons.	Pending on 1st January 1863.	Arrested during the year.	Total.	Government.	Commissioner.	Rajah.	Government.	Commissioner.	Rajah.	Police.	Pending on 31st Dec. 1863.	Died.	Escaped.	Transferred.
Class XI.—Offences affecting the human body.	1	Murder ...	4	24	...	2	2	1	...	...	1	...	...	...	...	...	...
	2	Rape ...	5	8	...	6	6	1	...	1	2	...	...	...	...	...	...
	3	Attempt at Rape ...	1	1	...	1	1	1	...	...	...	...	...	...	...	...	...
	4	Kidnapping or forcible abduction, other cases ...	5	7	...	7	7	...	...	1	6	...	...	...	...	...	...
	5	Hurt with aggravating circumstances ...	2	2	...	2	2	2	...	...	...	...	...	...	...	...	...
	6	Hurt, other cases ...	4	4	...	3	3	...	3	...	...	...	...	...	...	...	...
	7	Criminal force or assault ...	14	27	...	27	27	...	15	...	11	...	1	...	...	...	...
	8	Wrongful confinement ...	1	4	...	4	4	...	4	...	...	...	...	...	...	...	...
	9	Wrongful restraint ...	1	7	...	...	...	...	...	...	...	...	...	...	...	...	...
Total		37	118	...	52	52	1	4	23	3	10	3	...	...	...	...
Class XII.—Offences against property.	1	Dacoity with murder ...	3	40	...	...	...	...	...	...	...	...	...	...	...	...	...
	2	Ditto with attempt to cause death or grievous hurt ...	3	20	...	...	...	...	...	...	...	...	...	...	...	...	...
	3	Robbery, other cases ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	4	Theft, other cases ...	10	18	...	15	15	...	11	...	3	...	1	...	...	...	...
	5	Extortion, other cases ...	5	6	...	5	5	...	3	...	2	...	...	...	...	...	...
	6	Receiving or habitually dealing in stolen property ...	3	7	...	7	7	...	7	...	...	...	...	...	...	...	...
	7	Mischief with aggravating circumstances ...	3	15	...	...	...	...	...	...	...	...	...	...	...	...	...
	8	Criminal trespass, other cases ...	5	11	...	9	9	...	8	...	1	...	...	...	...	...	...
	9	Criminal misappropriation of property ...	1	1	...	1	1	...	...	...	1	...	...	...	...	...	...
Total		34	118	...	37	37	...	29	...	7	...	1	...	...	...	...
Class XVI.—Defamation.	1	Defamation ...	1	4	...	1	1	...	...	...	1	...	...	...	...	...	...
	Total		1	4	...	1	1	...	...	...	1	...	...	...	...	...	...
Class XVII.—Criminal intimidation, &c.	1	Criminal intimidation, insult, and annoyance, other cases ...	3	5	...	4	4	...	...	...	4	...	...	...	...	...	...
	Total		3	5	...	4	4	...	...	...	4	...	...	...	...	...	...
Class XVIII.—Miscellaneous.	1	Neglect of duty in Kotewars...	1	1	...	1	1	...	1	...	...	...	...	...	...	...	...
	2	Bribery ...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
	3	Neglect of duty in Jail servants	1	1	...	1	1	...	1	...	...	...	...	...	...	...	...
	4	False and vexatious complaint	1	1	...	1	1	...	1	...	...	...	...	...	...	...	...
Total		4	4	...	3	3	...	3	...	...	...	...	...	...	...	...	...

31. In the case of culpable homicide which occurred in Odeypore the prisoner after quarrelling with the deceased killed him with a stick.

32. There are no other cases in the Statements for 1862 requiring notice; the particulars of the forgery cases were given in paragraphs 16 to 19 of my Report for 1861-62. The proportion of persons convicted to the number supposed to be concerned in cases and to the number under trial is satisfactory.

33. Under Classes XI. and XII. in the cases for 1863 the Calendar of crime is swollen and the results appear unsatisfactory in consequence of serious depredations committed during the year by the wild hill tribe called Korowahs, with whom the ordinary Police of Sirgoojah were unable to cope.

34. Six of the cases returned as murder or dacoity with murder, six of grievous hurt, three of mischief, and one of wrongful restraint were reported as having been committed by these savages, who, confining their depredations to villages at the foot of the hills, were not traceable an hour after the offence was committed.

35. In my letter No. 877 of the 19th May 1863, I submitted the substance of Reports received up to that date concerning these depredations, and the instructions given by me to the Rajah on the subject were approved.

36. It appeared to me that the sudden outbreak of this tribe who had been peaceable since 1858, could only be in retaliation for some wrong, real or imaginary, done to them. The Rajah was called on to state if such was the case, and independent information was sought for through the

agency of Chupprassees sent by me to villages south of the hills occupied by the Korewahs; and through a Police Inspector sent to the villages that had suffered on the north side. The Rajah established posts round the hills, and parties were sent to scour them in pursuit of the marauders, but all to no purpose, the depredations continued, and in the wide range of mountainous country open to them all trace of those who committed them was speedily lost.

37. The Rajah now tried other measures, and in June by making use of my Chupprasee he found means of communicating with the Korewah leaders. Eventually they were induced to appear before him. In short they surrendered on promise of fair treatment and on their entering into agreements to settle in the plains and live peaceably; for the future lands were assigned to them, upon which they at once settled, and they have been ever since perfectly quiet.

38. I encamped at Oomko near their Settlement and they came to me with their wives and children, and it appeared to me that it would be impolitic to interfere with the arrangements made, especially as I found they would not have willingly gone to the Rajah had they not received assurances from my Chupprassees that they would be well received by him and by me. It was clear, moreover, as previously surmised by me, that the crimes were *not* acts of wanton mischief, or for the mere sake of plunder, but acts done deliberately in retaliation for wrongs that, in their opinion, had been inflicted on them.

39. In 1857-58 simultaneously with the insurrection in Palamow serious disturbances broke out in Sirgoojah, in which the tribes of Korewahs took an active part. We had no means of assisting the Rajah at the time; he was directed to take measures himself for restoring order, and in the operations that ensued the Korewahs of the Chulgullee hills suffered greatly.

40. A very large Force was employed against them. They say they were hunted like wild beasts, starved, shot at, and destroyed till but a remnant of the tribe was left, who found a retreat, in which they remained unmolested and quiet for three or four years. Here gradually a band was formed under four leaders, three brothers, Rughoowa, Rumna, and Punisa, and Singili, the last a notorious freebooter, and in June 1862 they appeared in some force and levied contributions on villages in the Estate of Lall Ghunsham Sing, a cousin of the Rajah. They then again disappeared and nothing was heard of them for several months. In December 1862 the leader Rughoowa and two of his followers and his wife were seized by the villagers of Kurmi in

Chulgullee and sent to the Rajah at Pertappore. But Rughoowa did not reach Pertappore; he is reported to have died of fever on the road. His two companions and the woman arrived there, but they all three died of cholera.

41. The Korewahs believe that Rughoowa was unfairly dealt with; they say, and I believe truly, that he was enticed into the village under pretence of friendship and freely plied with liquor, and that he and his companions were in a state of helpless intoxication when the villagers made them prisoners. They do not believe that Rughoowa or any of the party died a natural death.

42. It was in retaliation for what they consider this perfidy and the loss of their leader, as well as in remembrance of the punishment inflicted on them in 1858, that they committed the depredations detailed in the early part of 1863. The actual number engaged in them was insignificant, but there are many thousands of the tribe in the Sirgoojah and Jushpore hills. There are no wilder savages in India, and if they can be induced to settle in the plains and amalgamate with the peaceable and more civilized inhabitants a great object will be gained.

43. The Statement gives two other cases of murder reported in 1863. In one the Prisoner killed a Bunya in a very deliberate manner and was sentenced capitally; but whilst under reference to Government for confirmation the prisoner effected his escape from the Ranchee Jail and has not since been heard of. In the other case it was proved to my satisfaction that the blow which caused the death of a young girl, the prisoner's wife, was accidental and he was released.

44. In the one case of robbery under Class XII. some traders were plundered whilst passing through the country, but they left it without lodging any complaint, and the Police could obtain no clue to the perpetrators. The convictions in theft cases and burglaries bear a satisfactory proportion to the acquittals and to the number reported as concerned. There are no other points that appear to call for remarks.

45. The following Memorandum shows the operations of the Sirgoojah Police in recovering stolen and plundered property :—

Total amount of Property plundered in House trespass and Thefts.	Value of Property plundered in all cases reported.	Value of Property recovered.	Percentage of recovery.
	Rs. As. P.	Rs. As. P.	Rs. As. P.
House trespass with intent to commit theft	77 0 0	15 4 0	19 12 10
Theft	289 0 0	87 10 0	30 5 1

46. The subjoined Memorandum gives the number of accidental deaths in 1862-63 :—

	Drowned.	Bitten by snakes.	Burnt.	Killed by lightning.	By wild animals.	By bite of mad animals.	By fall from trees.
Men ...	4	22	1	2	56	2	2
Women ...	5	22	1	3	12	1	0
Boys ...	1	3	2	0	5	1	1
Girls ...	2	5	0	0	0	0	0
Total ...	12	52	4	5	73	4	3

47. **ROADS AND COMMUNICATIONS.**—Since my last visit to Sirgoojah the Rajah had made considerable progress in road-making and greatly improved many of the communications. The western portion, comprising about half of Sirgoojah, is very favorable for road-making, and where there are no great engineering difficulties the Rajah manages very well. A roadway upwards of thirty feet in breadth is marked out, thoroughly cleared of jungle and roots and levelled, and mangoe or other trees are planted on both sides and carefully preserved. He has made in this manner a northern road from Pertappore, in the Palamow direction, eight miles; it stops at the Ghaut. Four miles of a road in north-west, or Mirzapore direction. Twenty miles west in the direction of Korea. South eight miles of road to Bistrampore. East to Ranchee the road has been marked out to the Sirgoojah boundary. For forty-two miles, or from Pertappore to Oomko, this is a very good fair-weather road, but for the most part unbridged. The remainder, to the boundary of the Loharduggah District, is through a difficult hilly country, and the road having been carried in a line nearly straight without reference to obstacles over hills and through ravines it is in some places impracticable for cattle, and the old pathway is the preferable communication.

48. I have, in my Report of the 17th November 1857, No. 95, pointed out the importance and feasibility of a road through Sirgoojah as the continuation of a road through Chota Nagpore to connect by the shortest route Calcutta and Jubbulpore, and to open out the rich, but almost unknown, countries intervening. The proposal was ably taken up by Major Briggs, of the Department of Public Works, who volunteered his services to lay out the road. If the Government could spare the services of an Engineer to select, survey, and mark out the best line for a road from Ranchee,

west through Sirgoojah and Korea, to the borders of the Jubbulpore District, the labor, often misdirected, of the people employed by the Chiefs in road-making could be concentrated on it, and it would be soon opened out and cleared; but as the Chiefs could not afford to pay for skilled labor the Government would of course have largely to aid the undertaking. Sirgoojah and Korea are not perpetually settled, and if the road become a means of greatly enriching those Estates, additional revenue might fairly be demanded to meet some portion of the expense.

49. **JUSHPORE.**—I entered the lowland portion of Jushpore from Gaugpore, the Rajah Pertap Narain Singh Bahadoor meeting me before I touched his boundary, and marched to Jugdispore, the residence of the Rajah, which is situated on the plateau, and is higher, I think, than Chota Nagpore, and much colder. The ground during the cold weather months is every morning covered with hoar-frost, which is rare in Chota Nagpore. The weekly market was held whilst I was at Jugdispore and was well attended.

50. Jushpore exported in 1863 about 10,000 maunds of cotton and about as much more was retained for local consumption; the high prices have given great encouragement to the producers, and the cultivation next season is likely to increase considerably. The other exports meriting notice are iron and oilseeds.

51. Jushpore is about fifty miles in length from north to south, by thirty in greatest breadth from east to west, and at a rough estimate, for the boundaries are not laid down on any map, may contain 1,000 square miles. It has upwards of 200 villages exclusive of the hamlets or detached huts of the migratory hill savages called Korewahs, and the population has been returned at 87,000 souls. The total income of the Rajah from all sources does not, according to the information given to me, much exceed Rupees 6,000. With this moderate income he maintains a very becoming State and so rules as to be greatly beloved by his people.

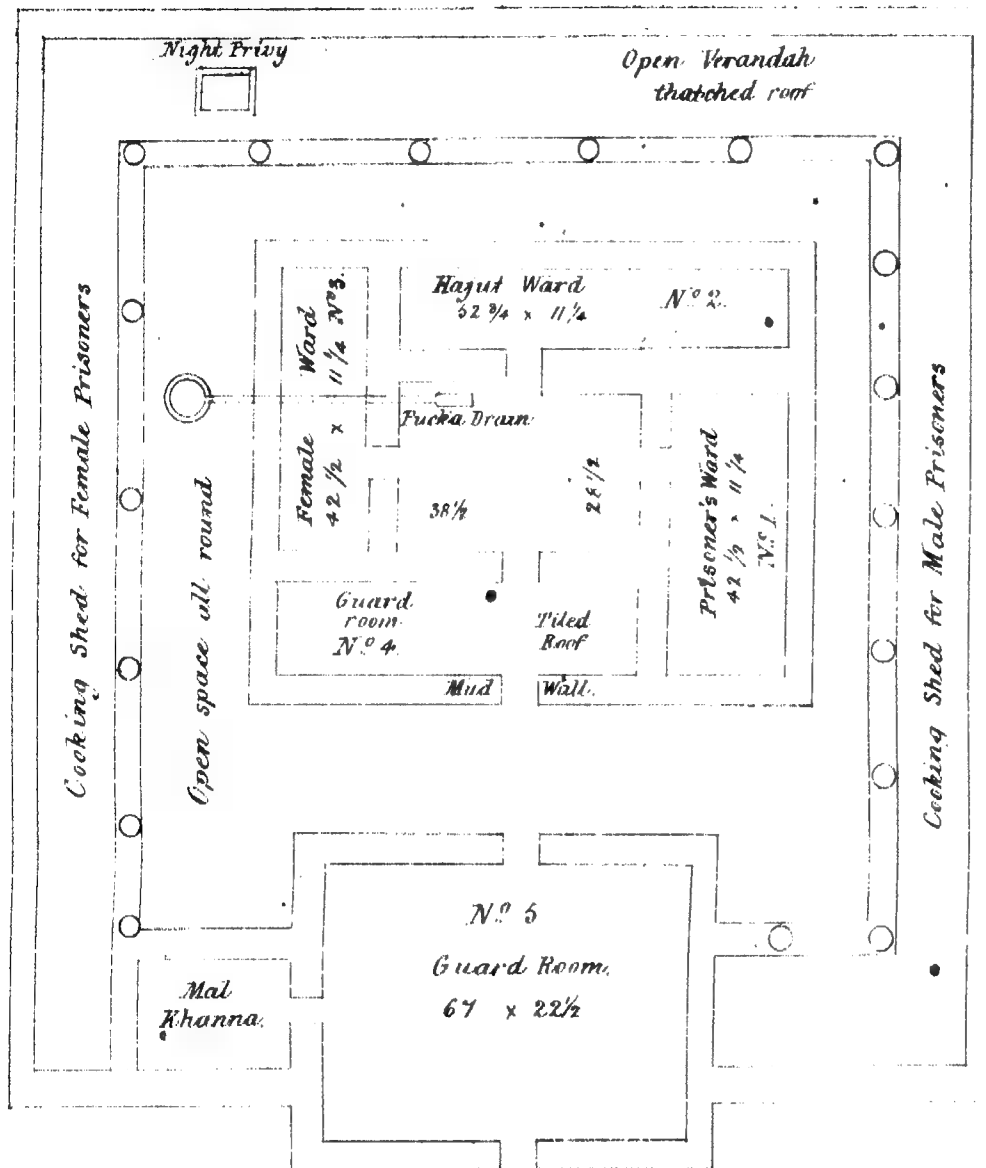
52. Jushpore is about equally divided into highlands and lowlands, called "Oopur Ghaut" and "Heth Ghaut." The highlands consist of a magnificent plateau, a continuation of the great plateau of Chota Nagpore, averaging upwards of 2,000 feet above the level of the sea and fringed by hills rising in places 1,000 feet higher. The lowlands lie in steppes descending towards the south, broken by low ranges of hills and isolated masses of granite rock.

53. The population of the plateau consists chiefly of Oraons (or Coles) settled in villages; the hills rising above the plateau give shelter to the wild Korewah tribe, who are migratory. The lowlands are colonized from Orissa, Gangpore, Palamow, and the Western Estates by Mukhoors, Bhooyas, Khairwars, and Kaurs with a sprinkling of other Hindoo castes.

54. Since my last visit to Jugdispore the Rajah, in conformity with the instructions then

given to him, has built for himself, detached from his private residence, a commodious Court House in which open Court is held, and a Jail or Lock-up so well adapted in every respect to its purpose that I give a Plan of it in the margin.

55. The Jail was perfectly sweet and clean; there were in it fifteen prisoners, who appeared healthy and well cared for. They had no complaints to make or appeals to prefer. According to the books, which were regularly kept, there had been no death casualties amongst the prisoners in 1863, or since 30th April 1862. The expenses of the Jail are de-



frayed from the fines imposed in Criminal cases. From May 1862 to December 1863 the fines imposed amounted to Rupees 349, all realized

Name of Estate.	Pending on the 30th April 1862.	Instituted from May 1862 to December 1863.	Total.	Decided.	Pending on 31st December 1863.
Jushpore	...	35	35	35	...

56. The marginal Statement shows the number of Civil suits decided by the Rajah; he had no cases pending either at the commencement

or at the end of the period under report; there is no doubt in this a straining to show clear files, but all business in Jushpore is promptly attended to by the Rajah himself.

57. The subjoined classified Statements of crime are separately given for the 1st May to the close of 1862 and for the year 1863. As compared with the Returns for 1861-62 they exhibit a satisfactory decrease in heinous offences of all kinds :—

DETAIL OF OFFENCES.		MAY TO DE- CEMBER 1862.		NUMBER OF PERSONS UNDER TRIAL.			CONVICTED.			ACQUITTED, DIS- CHARGED, OR RE- LEASED ON BAIL.			December		Died.	Escaped.	Transferred.
		Cases.	Persons.	Pending on 1st May 1862.	Arrested during eight months.	Total.	Government.	Commis- sioner.	Rajah.	Government.	Commissioner.	Rajah.	Police.	Pending on 31st 1862.			
Class XI.—Of- fences affecting human body.	1	Murder	1	1	1	1	...	...	...	...	...	1	...	...	...	...	...
	2	Culpable homicide	4	1	4	5	...	4	...	...	...	...	...	1	...	...	...
	3	Rape	3	3	3	3	...	...	1	...	...	2	...	...	...	...	...
	4	Criminal force or assault	12	31	31	31	...	...	27	...	...	4	...	...	...	...	...
		Total	18	39	1	39	...	4	28	...	...	7	...	1	...	...	...
Class XII.— Offences against property.	1	Theft, other cases	7	18	18	18	...	...	10	...	...	5	...	...	...	...	3
	2	Extortion, other cases	3	12	12	12	...	...	3	...	...	9	...	...	...	...	...
	3	Criminal trespass, other cases	1	5	5	5	...	...	4	...	...	1	...	...	...	...	...
		Total	11	35	35	35	...	...	17	...	...	16	...	...	...	...	3
Class XV.— Offences re- lating to marriage.	1	Offences relating to marriage	2	4	4	4	...	...	4	...	...	...	...	...	...	...	...
		Total	2	4	4	4	...	...	4	...	...	...	...	...	...	...	...

DETAIL OF OFFENCES.			1863.		NUMBER OF PERSONS UNDER TRIAL.		CONVICTED.			ACQUITTED, DISCHARGED, OR RE-LEASED ON BAIL.			Pending on 31st Dec. 1863.		Died.	Escaped.	Transferred.
			Cases.	Persons.	Pending on 1st January 1863.	Arrested during the year.	Total.	Government.	Commissioner.	Rajah.	Government.	Commissioner.	Rajah.	Police.			
Class XI.—Offences affecting human body.	1	Culpable homicide	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...
	2	Rape	...	1	1	...	1	...	...	...	1	...	...	...	...	...	...
	3	Criminal force or assault	...	9	...	24	24	...	...	11	...	...	13	...	...	...	...
	Total		...	10	25	1	25	26	...	1	11	...	1	13
Class XII.—Offences against property.	1	Theft, other cases	...	10	17	...	17	17	...	...	13	...	...	4	...	...	...
	2	Extortion, other cases	...	4	9	...	9	9	...	...	6	...	...	3	...	...	...
	3	Mischief, other cases	...	1	1	...	1	1	...	...	1	...	...	...	...	...	...
	4	Criminal trespass, other cases	...	4	13	...	13	13	...	...	6	...	...	7	...	...	...
Total		...	19	40	...	40	40	...	...	26	...	...	14	...	...	...	...
Class XVI.—Defamation.	1	Defamation	...	1	3	...	3	3	...	...	...	...	...	3	...	...	...
	Total		...	1	3	...	3	3	...	...	...	...	...	3	...	...	...

58. The monthly Returns rendered by the Rajah gave only those cases that were tried. When examining the books I found a few entries of charges of theft and burglary in which no enquiry had been made, and which did not appear in the Returns, and I directed my

Serishtadar to make a note of them for the correction of the Annual Report, but I find he has neglected to do so. It could not, however, have made very much difference, as I do not think there were more than three or four of such cases.

59. The Rajah has evidently paid great attention to the orders in paragraph 4 of your Office letter No. 851, dated 25th February 1863, on my Report for 1861-62. The marginal Statement gives a very satisfactory return of stolen

Total amount of Property plundered in House trespass and Theft.	Value of Property plundered in all cases reported.	Value of Property recovered.	Percentage of recovery.
	R. A. P.	R. A. P.	R. A. P.
House trespass with intent to commit theft	21 13 0	24 13 0	100 0 0
Thefts	40 0 0	30 0 0	75 0 0

property recovered, but it is only for cases that were enquired into.

60. The Statement for the last eight months of 1862 gives one case reported as murder, but the verdict was justifiable homicide. The accused having killed a person who entered his house at night with a view of committing theft, the Rajah acquitted the prisoner, but referred his decision for confirmation. It was confirmed by Colonel Verner, Officiating Commissioner.

61. Of the two cases of culpable homicide one was pending at the close of the year 1861-62, and is noticed in paragraph 29 of my Report for that year.

62. In one of the two cases of culpable homicide instituted in 1862 the Rajah referred his proceedings, and his conviction of the accused and sentence of one to five years, and two to one and two years, was confirmed by the Officiating Commissioner. The other case was pending at the close of the year.

63. Of the three cases returned as rape the charge was not proved in two, and the Rajah released the accused; the third case he referred after passing sentence for one year. This was confirmed by the Officiating Commissioner. Under the Rules now promulgated the Rajah is required to commit such cases and all cases of homicide to my Court for trial.

64. During the year 1863 there were no new cases of homicide reported. The homicide case pending on the 1st January 1863 arose out of a drunken brawl between two Korewahs; the case was referred by the Rajah for confirmation of a sentence of six years' rigorous imprisonment passed by him on the accused; a mitigated sentence of four years was passed by this Court.

65. The case of rape was not proved, and there is nothing deserving of notice in the cases of criminal force or assault.

66. The Statement of cases under Class XII.

Total amount of Property plundered in House trespass and Theft.	Value of Property plundered in all cases reported.	Value of Property recovered.	Percentage of recovery.
	R. A. P.	R. A. P.	R. A. P.
House trespass with intent to commit theft	110 11 0	30 6 0	27 7 8
Thefts	40 7 0	30 7 0	100 0 0

for 1863, and the marginal Statement showing the value of property stolen and recovered, is very favorable to the Rajah and his Police.

67. The proprietor under the Rajah of Tuppah Khoria, in Jush-

pore, is the only person that it is considered

expedient to invest with the powers as Illaquadar of Police under Sections 4 and 5 of the new Rules.

68. He is himself a Korewah, but a civilized Korewah. His Estate consists chiefly of Hills inhabited by Korewahs. He is the hereditary Chief of the Korewah clan and hereditary Dewan of Jushpore. He scarcely yet possesses the influence of his elder brother, whom he not long ago succeeded; but since the recognition of his grandfather and father in the above offices by the British Government the Korewahs in Jushpore have been quiet and amenable, and it is of importance to the peace of that country that the arrangement be continued.

69. The following Memorandum gives the number of accidental deaths in 1862-63 :-

	Drowned.	Bitten by snakes.	Burnt.	Killed by lightning.	By wild animals.	By bite of mad animals.	By fall from trees.
Men	1	1	...	2	...	...	3
Women	...	2	...	1	...	...	1
Boys	1	1	...	...	...	...	1
Girls	...	...	...	1	...	...	...
Total	4	4	...	4	2	...	5

70. ROADS AND COMMUNICATIONS.—The Rajah has made a very good bridge road up the Ghaut by which I ascended from Gangpore, but it is abrupt, and the services of a good Engineer would be required to render it practicable for carts. From the Rajah's residence to the boundary of Chota Nagpore there is a very good fair-weather road annually repaired by the Rajah. To meet this it is desirable that the Loharduggah and Chuttra Road be made in continuation from Loharduggah to Palkote and the boundary of Jushpore; this would be a comparatively easy line, and it would be used for the traffic from Odeypore, Western Gangpore, Chutteesgurb, and Jushpore.

71. The other approaches to Upper Jushpore from the south are so abrupt that they are barely practicable, for laden cattle and horsemen have generally to dismount.

72. I have much pleasure in bringing to the notice of His Honor the Lieutenant-Governor the admirable manner in which Rajah Pertapnarain Singh administers the affairs of Jushpore. He is an excellent Magistrate, a conscientious Judge, and a benevolent Landlord.

73. GANGPORE.—This is a vast Estate extending from the southern foot of the plateau of Chota Nagpore to the boundary of the Sumbulpore District. It is ninety-seven miles in length from east to west, and thirty-five in breadth from north to south. As the Topographical Survey now going on is not yet complete, its area cannot be correctly given. It is computed to be about 2,000 square miles, but the cultivated area

bears a very small proportion to the waste about one-tenth, and I roughly estimate the population at not more than 50,000 souls.

74. It contains nominally 700 villages, but many of these are wretched hamlets of two or three houses only. The majority of the population are of the Bhooya caste, but there are a considerable number of Cole Immigrants from Chota Nagpore, and Goands from the Southern Estates. The latter are the least industrious and most disorderly section of the people, and there are some 2,000 of a tribe of Hindoos called Ageriahs, who in character are the reverse of the Goands, as they are the most thriving and best conducted race I have seen in the Tributary Mehals.

75. The southern part of Gangpore bordering on Sumbulpore is the location of the Ageriahs, and it is in a higher state of cultivation and civilization than any other portion of the Estate. It was the villages of these Ageriahs that were plundered in November last by the band under Baijnauth Duss, who were nearly all Goands.

76. I entered Gangpore from Singbhoom and in proceeding through a portion of it to Bonai and returning, going down south till I touched the boundary of Sumbulpore, then north of Jushpore, I traversed it in various directions, thus seeing a great deal of the country and the people, and I succeeded, I think, in establishing a greater feeling of confidence and security and better relations between the Rajah and the Zemindars holding under him.

77. But Gangpore is not fortunate in its Chief. Junardun Seekhur is an old man recently raised from the plough to the "Guddee," illiterate and inert, and his second son, on whom the business of the Raj chiefly devolves, is an inveterate opium-eater and cannot be depended on. The heir is the Rajah's grandson, an intelligent lad of whom something might be made, and the Rajah agreed to send him to Ranchee to remain under my care for his education. Now the mother of the boy demurs at parting with him.

78. The family is large, but of those grown up there is not one who is capable of assisting the

Rajah in the preparation of cases, keeping his Registers, and writing his Reports, and he will not give such pay as will secure the service of a good Moonshee. I think, therefore, we should insist on his sending his grandson to be educated as the condition on which the head of the family will be allowed to continue in the exercise of Judicial and Criminal powers.

79. The Rajah has not yet taken up the site he intends permanently to occupy, and all his present arrangements are of a temporary nature, and his own house a mere collection of dilapidated and disreputable looking huts. He has stockaded a few huts which he uses as a Lock-up, but has not yet built a regular Jail.

80. In 1861-62 I was at considerable pains to explain to the Rajah the proper way of carrying on business. I found some small improvement certainly, but there was still much to find fault with, not only in the mere Office work, but in the injustice and impolicy of some of the Rajah's orders and acts.

81. Gangpore should be visited every year by an Officer till an equitable and systematic mode of administering justice is better understood there, and if I cannot visit it myself next cold season, I propose to direct the Deputy Commissioner of Singbhoom to do so.

82. There were twenty prisoners in Jail at Gangpore when I visited it, the cases of all of them were under reference to me; a few were released, the remainder were sent to the Ranchee Jail before the end of the year.

83. Civil suits are almost unknown in Gangpore; the only method resorted to for disposing of disputes of this nature is that of adjudication by village Punchayets. The Rajah had one suit

Jugernath Manjhee
Oodey Seekhur.

only which was instituted in his Court by a resident of Loharduggah to reverse a decision of the

Officer in charge of the Topographical Survey. This suit is now before Government.

84. The classified criminal Statements are given, as for the other Estates, for eight months of 1862 and the whole of 1863.

DETAIL OF OFFENCES.		MAY TO DECEMBER 1862.		NUMBER OF PERSONS UNDER TRIAL.			CONVICTED.		ACQUITTED, DISCHARGED, OR RELEASED ON BAIL.				Pending on 31st December 1862.	Died.	Escaped.	Transferred.
		Cases.	Persons.	Pending on 1st May 1862.	Arrested during the year.	Total.	Government.	Commissioner.	Government.	Commissioner.	Rajah.	Police.				
Chas Hill. — Offences against property.	1. Theft, other cases	...	2	6	...	6	...	6	...	...	1	...	...	...	...	...
	Total	...	2	6	...	6	...	6	...	...	1	...	...	...	...	...

DETAIL OF OFFENCES.			1863.		NUMBER OF PERSONS UNDER TRIAL.		CONVICTED.			ACQUITTED, DISCHARGED, OR RE-LEASED ON BAIL.				Pending on 31st December 1863.	Died.	Escaped.	Transferred.
			Cases.	Persons.	Pending on 1st January 1863.	Arrested during the year.	Total.	Government.	Commissioner.	Rajah.	Government.	Commissioner.	Rajah.	Police.			
Class XI.—Offences against human body.	1	Murder	3	■	...	19	19	...	...	...	...	1	■	...	12	...	...
	2	Criminal force or assault	7	7	...	7	■	...	...	7	...	...	...	...	...	...	...
	■	Wrongful confinement	1	1	...	1	1	...	...	1	...	...	...	...	...	...	...
		Total	11	11	...	27	27	...	...	■	...	1	6	...	12	...	...
Class XII.—Offences against property.	1	Dacoity with murder	1	32	...	17	17	...	...	...	...	1	5	...	11	...	...
	2	Ditto, other cases...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	3	Theft, other cases ...	7	21	...	18	18	...	...	13	...	...	1	...	...	...	4
	4	Receiving or habitually dealing in stolen property	1	2	...	2	2	...	...	2	...	...	...	...	...	...	...
	5	Mischief, other cases	1	2	...	2	2	...	...	2	...	...	...	...	...	...	...
		Total	20	57	...	39	39	...	...	17	...	1	6	...	11	...	4
Class XVIII.—Miscellaneous offences.	1	False and vexatious complaints	1	1	...	1	1	...	1	...	...	...	...	...	...	...	...
	2	Neglect of duty in knowingly keeping a case secret	1	2	...	2	2	...	...	2	...	...	...	...	...	...	...
		Total	2	3	...	3	3	...	1	2	...	...	...	...	...	...	...

85. In the last half of 1862 there were no cases reported from Gangpore of any importance. The Statements for 1863 show four cases of murder. In one of these the Rajah found that the deceased died a natural death. He had been playing at single stick, and his antagonist was charged with having caused his death. The case was reviewed by me when in Gangpore on the appeal of the widow, the cause of death was not clear, but had it been owing to a blow from the weapon of the accused, as stated by the appellant, it would only have been a homicide by misadventure, and there was no occasion to interfere with the Rajah's order.

86. The other cases were committed to my Court, have been disposed of since the close of the year, and are now under reference to Government. This renders any detailed notice of them unnecessary. One* is the case of Khattoo Pab charged with the murder of Khattoo Mahaling and his mother.

* See my letter No. 829, dated 26th May 1864.

† See my letter No. 866, dated 20th May 1864.

The other† is the case of Baijnath Doss and others charged with the murder of Kallia and Karee Gounteahs, and the same persons stand charged with having committed dacoity in all the ten cases shown under Class XII. In this case some men arrested as implicated were released by the Rajah or myself, but several others have been arrested since the close of the year. I have convicted three of the murder and ten of the dacoities.

87. One of the Zemindars of Gangpore, Gungadhur Gurhowtea of Hemgir, was presented with a handsome Sword of Honor for his good

service in capturing, or causing the capture of the principal murderer and most of the dacoits in the case last mentioned, and the Gurhowtea's followers and others who assisted him were rewarded from a sum of Rupees 250 I was authorized to distribute amongst them.

88. I gave Rupees 50 to Dusruth Manjhee, a petty Zemindar, who was very active in the business, and left it to the Gurhowtea to distribute the remainder amongst his followers as he thought proper. I anticipate good results from the prompt recognition by Government of these services.

89. The Gurhowtea who has been rewarded has always been loyal, and his Estate is a portion of one of the most extensive Jungle tracts in India, a tract which includes the notorious Baruhpahar of Sumbulpore that has long been known as a secure asylum for thieves and rebels. Gungadhur can travel twenty miles in a direct line over his own grounds without seeing a human habitation. A man who can capture dacoits in such a Hill jungle is invaluable.

90. About one-third of Gangpore is held by vassals in Estates of from 100 to fifteen villages, who pay low fixed rents and render service when called on for their lands. In the last thirty years there have been several changes in the Chieftainship, and as each new Rajah had his own particular supporters to reward and others to conciliate, a great proportion of the remainder of the property has been frittered away in grants on similar terms. There are also several widows to provide for, and I believe that after all these

deductions the Rajah's net income from ordinary sources does not amount to more than Rupees 3,000 or 4,000.

91. The assessment, even including the aggregate of irregular demands, is very light. According to my calculation it does not amount to more than from 1 Rupee to 1 Rupee 8 annas a year for each house or family, or about 3 annas a biggah of the cultivated area.

92. I found that Burgaon, a village of 100 houses in the Rajah's own hands, pays as follows :—

Rent Rupees 34, muggun or contribution Rupees 34,* and sixty-four maunds of rice; the price of rice is from one maund to two maunds for the Rupee. On births, deaths, and marriages in the Rajah's family the villagers are called on for additional contributions, and this amounts to from Rupees 50 to 40 a year. The total demand may therefore be estimated at about Rupees 160.

93. The soil of Gangpore is generally rich, producing the finest crops of sugar-cane and tobacco that I have ever seen. All the dates grow luxuriantly there, and cotton succeeds very well. The country is well watered by numerous rivers and streams. The ebb, an affluent of the Mahanuddee, an auriferous and diamond producing stream, flows through it from north to south; the Sunkh and Kqel unite in Gangpore and form the Brahminee; and the country might be irrigated to any extent by the waters of these rivers and minor streams. The mineral resources are vast, there are extensive beds of coal to the south and mountain limestone in the north. I have alluded to the gold and diamonds, but neither has yet been found in quantities that would be considered remunerative by a European speculator. There is also iron, but the great drawback is the climate. It is insufferably hot in southern Gangpore for two-thirds of the year. It was as hot in Gangpore when I was there in December and January as it is at Ranchee in October or March.

94. The subjoined Memorandum shows the operations of the Police in recovering stolen and plundered property :—

Total amount of Property plundered in thefts.	Value of Property plundered in all cases reported.	Value of Property recovered.	Percentage of recovery.
	Rs. As. P.	Rs. As. P.	Rs. As. P.
Thefts ...	100 0 0	98 0 0	98 0 0

95. **Bonai.**—Bonai lies between Singbhoom, Keonjhar, Damra, and Gangpore. It is for the most part a mass of uninhabited Hills, but about

its centre, on both banks of the Brahminee River, there is a fine fertile and comparatively level valley in which the more civilized portion of the population is chiefly concentrated.

96. Bonai Gurh, where the Rajah resides, is situated in the centre of this valley in a bend of the Brahminee.

97. The survey of this Estate topographically is complete. It is fifty-eight miles in greatest length from east to west and thirty-seven miles the greatest breadth from north to south, and the area is 1,297 square miles, of which not less than 1/11ths are jungle. It contains 300 villages, and the population computed from the number of houses is 15,623 souls. About one-half of the number are Bhooyas, who were the earliest settlers, and all the sub-proprietors are of that class, and here, as in other Estates in which Bhooyas were, the dominant race, the head of the clan claims the right of confirming the election of the Rajah.

98. The present Rajah of Bonai, by reason of unsoundness of mind, has ceased to exercise any control over the affairs of the Estate. His eldest son, the Tekait Dyanidhi, takes his place, and in the discharge of his duties as Manager has always given me unqualified satisfaction. He can read and write well in Hindee and Ooriah, and is active and intelligent.

99. I found he had complied with the instructions I gave him in 1861-62 to provide himself with a suitable Cutcherry and a Lock-up. There were only three prisoners, and they had a ward forty feet long by eighteen wide opening into a small court yard. It appeared secure, commodious, and sufficiently ventilated, and is substantially built.

100. There are several deserted village sites in Bonai surrounded by unexceptionable rice land, which, it is said, have been abandoned in consequence of the ravages of wild beasts. This is the great difficulty that new settlers in Bonai have to contend against. They complain not of loss of human life but of the destruction of cattle and crops; they have to raise grain for themselves and the beasts too. On this account very little cotton is raised though the soil appears well suited for it.

101. The store of Sál timber in Bonai is immense, but the isolated and inaccessible position of the forests will prevent its being utilized for years to come. Together with the Sál are found vast quantities of the Assun tree, on which the tusser silk worm feeds, and a considerable quantity of wild tusser is exported from Bonai and finds its way to the Chyebassa markets, but it is not much cultivated, as the mass of the

population regard it as an impure occupation, and none but the lowest castes—the Goands, Pahuns, Ghassees, &c.—practise it.

102. As yet no Civil suits have been instituted in the Tekait's Court. Such questions when they arise are settled by arbitration or by Punchayets

103. The subjoined Statements show that the Calendar of Criminal cases is very light both for the year 1863 and the last eight months of 1862 :—

DETAIL OF OFFENCES.			MAY TO DE- CEMBER 1862.		NUMBER OF PERSONS UNDER TRIAL.		CONVICTED.			ACQUITTED, DIS- CHARGED, OR RE- LEASED ON BAIL.				PENDING ON 31st Dec. 1862.			Escaped.	Transferred.
			Cases.	Persons.	Pending on 1st May 1862.	Arrested during eight months.	Total.	Government.	Commissioner.	Rajah.	Government.	Commissioner.	Rajah.	Police.	Pending on 31st Dec. 1862.	Died.		
Class XI.—Of- fences affect- ing human body.	1	Hurt, other cases	...	1	1	...	1	1	...	...	1	...	...	...	...	...	...	...
	2	Criminal force or assault	...	1	1	...	1	1	...	...	1	...	...	...	...	...	...	...
	Total	...	2	2	...	2	2	2	...	...	2	...	...	...	...	...	...	...
Class XII.—Of- fences against property.	1	Theft, other cases	...	3	4	...	4	4	...	...	2	...	...	1	...	...	...	1
	Total	...	3	4	...	4	4	4	...	...	2	...	...	1	...	...	...	1

[illegible]

104. The following Memorandum shows the operation of the Police in recovering stolen property:—

Total amount of Property plundered in House trespass and Thefts.	Value of Property plundered in all cases.	Value of Property recovered.	Percentage of recovery.
	Rs. As. P.	Rs. As. P.	Rs. As. P.
House trespass with intent to commit theft	5 2 0	0 0 0	0 0 0
Thefts	2 8 0	2 8 0	100 0 0

105. The subjoined Memorandum gives the number of accidental deaths in 1862-63:—

	Drowned.	Bitten by snakes.	By wild beasts.	Suicides.
Men	2	1	4	1
Women	...	1	3	2
Boys	1	...	1	...
Girls	...	...	...	...
Total	3	3	8	3

106. **ROADS AND COMMUNICATIONS.**—Bonai, surrounded as it is by vast ranges of uninhabited mountains, is difficult of access. I was informed that a road might be opened from Singbhoom through Sarundah more easily than by any of the existing lines, and have directed the Deputy Commissioner of Singbhoom to report upon it. It would be a continuation of the road under construction from Chyebassa through the Porahaut Estate to Dwipa.

107. A better outlet for trade would be by the Brahmince River, which for canoes is navigable to the borders of Bonai. I endeavored to establish a market at the point to which it is said canoes can ascend, but without success.

108. KOREA.—In consequence of unsoundness of mind of her husband the Ranee, Kundum Koomaree administers the affairs of this Estate. By a second wife the Rajah has one son. I fear he will prove, like his father, of weak intellect. I was unable to visit Korea, or the still more remote Estate of Chang Bukhar. Neither of these Districts have been surveyed, and as their boundaries are not laid down on any map it is impossible to give their area. The population of Korea has been estimated at 17,200, and of Chang Bhukhar at 10,000 souls.

[illegible]

DETAIL OF OFFENCES.			1863.		NUMBER OF PERSONS UNDER TRIAL.			CONVICTED.			ACQUITTED, DISCHARGED, OR RELEASED ON BAIL.				PENDING ON 31st DEC. 1863.		
			Cases.	Persons.	Pending on 1st Jan. 1863.	Arrested during the year.	Total.	Government.	Commissioner.	Rajah.	Government.	Commissioner.	Rajah.	Police.	Pending on 31st Dec. 1863.	Died.	Escaped.
Class XI.—Offences against human body.	1	Murder	...	1	2	...	2	2	...	...	...	...	...	...	2	...	...
	Total	...	1	2	...	2	2	...	...	...	...	...	...	...	2	...	...
Class XII.—Offences against property.	1	Theft, other cases	...	7	...	7	7	...	...	...	...	...	...	...	1	...	...
	2	Criminal trespass, other cases	...	6	...	6	6	...	...	6	...	...	...	...	...	...	...
Total		...	7	13	...	13	13	...	...	11	...	...	...	...	1	...	...

109. During the period under review there was only one case of murder reported, the deceased were committed to my Court and to save the witnesses a long journey I tried the case when in Sirgoonjah. Two prisoners were committed, one I acquitted and discharged, the other who pleaded guilty to having killed the deceased designedly from motives of jealousy was convicted. The sentence of transportation passed on him by me was confirmed* by the Hon'ble the Lieutenant-Governor. There are no other cases that need be noticed.

* In the Under-Secretary's letter No. 1841 of the 21st March last.

In Jail on 30th April 1862.	Sentenced from May 1862 to Dec. 1862.	Total.	Released.	Died.	Escaped.	In Jail on 31st Dec. 1863.
1	26	27	23	1	1	...

constructed for the accommodation of the prisoners.

Pending on the 30th April 1862 ...	2
Instituted from May 1862 to December 1863 ...	7
Total ...	9
Decided ...	9

	Killed by wild animals.
Men ...	3
Women ...	2
Boys ...	0
Girls ...	0
Total ...	5

gives the number of accidental deaths in this Mehal in 1862-63.

110. The state of the Jail for the whole period under review is given in the margin. The Dewan assures me that a suitable building has been constructed for the accommodation of the prisoners.

111. The marginal Statement gives the number of Civil suits instituted and decided.

112. I am satisfied with the Ranees management, it appears to give satisfaction to her people.

113. The marginal Memorandum

114. The following Memorandum shows the operation of the Police in recovering stolen property:—

Total amount of Property plundered in House trespass and Thefts.	Value of Property plundered in all cases.	Value of Property recovered.	Percentage of recovery.
Criminal trespass with intent to commit thefts ...	50 2 0	Not ascertained.	
Thefts ...	235 0 0	Ditto.	

115. CHANG BHUKHAR.—The Chief of this Estate, the most remote of all from my Head Quarters, is Bhuya Bulbhuder Singh. It has never been visited.

116. The Bhuya's Monthly Returns are generally blank, and no cases have been committed by him to my Court during the period under report.

117. The rebel Rammust Singh took up his quarters in this Mehal during the disturbances, and the country and its Chief were much impoverished by his demands and extortions. On this account the tribute or revenue had for some years been in arrears, but the Tabular Statement of demands, collections, and balances will show that the arrears and current revenue were all liquidated during the period under report.

118. The subjoined Statement will show that the collections of Government Revenue from all the Tributary Mehals is in a satisfactory state :—

NAMES OF ESTATES.	Balance of 1260 F. S.	Demand of 1270 F. S.	Total.	Collections.	Balances.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Sirgoolah and Jushpore ...	0 0 0	2,886 11 0	2,886 11 0	2,886 11 0	0 0 0
Oodeypore ...	0 0 0	533 5 0	533 5 0	533 5 0	0 0 0
Gangpore ...	0 0 0	500 0 0	500 0 0	500 0 0	0 0 0
Korea ...	0 0 0	400 0 0	400 0 0	400 0 0	0 0 0
Bonai ...	0 0 0	200 0 0	200 0 0	200 0 0	0 0 0
Chang Bhukhar ...	830 18 0	386 8 0	1,217 0 0	1,217 0 0	0 0 0
Total ...	830 18 0	4,886 3 0	5,517 0 0	5,517 0 0	0 0 0

119. The following Memorandum will show the state of the Jails in the several Estates during the whole period under review. A Memorandum of fines imposed and realized by the Chiefs in Criminal cases is also subjoined :—

NAMES OF ESTATES.	In Jail on 30th April 1863.	Sentenced from May 1863 to December 1863.	Total.	Released.	Died.	Escaped.	In Jail on 31st December 1863.
Sirgoolah and Oodeypore ...	54	52	106	66	11	15	14
Jushpore ...	25	40	74	55	...	...	19
Gangpore ...	...	20	20	20	...	...	...
Korea ...	1	26	27	25	1	1	...
Bonai ...	...	10	10	7	...	...	3
Chang Bhukhar ...	...	...	...	...	...	...	...
Total ...	80	167	237	173	12	18	38

Fines.

	Rs.	As.	P.	
Sirgoolah and Oodeypore ...	275	0	0	} All realized.
Jushpore ...	349	0	0	
Gangpore ...	268	0	0	
Korea ...	None.			
Bonai ...	34	8	0	
Chang Bhukhar ...	0	0	0	
Total Rupees ...	926	8	0	

Extract from the Proceedings of the Lieutenant-Governor, in the General Department, under date the 27th July 1864.

Read a letter, No. 933, dated 3rd ultimo, from the Commissioner of Chota Nagpore, reporting on the administration of the Tributary Mehals on the South-West Frontier for the year 1863-64.

2. The Lieutenant-Governor notices with satisfaction the great improvement that has taken place in the manner in which the proceedings in Criminal cases have been conducted by the Chiefs of the Tributary Mehals.

3. The Lieutenant-Governor is glad to observe that Lali Mukeshures Pershad Sing, now that he has attained his majority, adheres to the system of managing his Estate, which was deemed successful when it was under the Court of Wards.

4. The proceedings reported in paragraphs 16 to 21 regarding the management of the Sirgoolah Estate, and provision made for the maintenance of the Bismampore Branch of the family, are approved.

5. The Lieutenant-Governor regrets to observe that a number of prisoners effected their

escape from Jail at Pertappore while employed on the roads at some distance from it. His Honor trusts that the instructions issued by the Commissioner to the Rajah for the better custody of the prisoners will be effectual, and that the matter may not be lost sight of.

6. The Lieutenant-Governor highly approves of the proceedings reported in paragraphs 36 to 38 regarding the settlement of the Korewabs.

7. The proposal submitted in paragraph 48 for the construction of a road from Ranchee west through Sirgoolah and Korea to the borders of the Jubbulpore District, and in paragraph 70 for the extension of the Loharduggah and Chuttra Road to Palkote and the boundary of Jushpore, will be transferred to the Public Works Department for consideration in that Department. Paragraphs 93, 106, and 107, relating to the resources of Gangpore, and to the means of opening a better communication with Bonai, will also be considered in the Public Works Department.

8. His Honor notices with satisfaction that the cultivation of cotton in Jushpore has much increased, and that the high prices of this article have encouraged the producers to extend their cultivation.

9. The Lieutenant-Governor is glad to observe that the affairs of the Jushpore Estate are promptly attended to by the Rajah himself, and that the Criminal Returns exhibit a satisfactory decrease in heinous offences of all kinds.

10. The Statement showing the value of property stolen and recovered does much credit to the Rajah and his Police.

11. His Honor approves of the proceedings reported in paragraphs 67 and 68 for investing the proprietor under the Rajah of Tappah Khoo-reah, in Jushpore, with the powers as Illaquadar of Police under Sections 4 and 5 of the new Rules.

12. The account of the manner in which Rajah Pertap Narain Singh administers the affairs of Jushpore, and of the character borne by the Rajah, has afforded the Lieutenant-Governor much satisfaction.

13. With reference to the remarks contained in paragraphs 77 and 78 of the Report the Lieutenant-Governor desires that the Commissioners will insist upon having the grandson of the Rajah of Gangpore sent to Ranchee for education under the Commissioner's superintendence according to the expressed wishes of the Rajah.

14. The Lieutenant-Governor concurs with the Commissioner in thinking that Gangpore should be visited by an Officer every year until satisfactory improvement is made in the mode of administering justice there. His Honor approves of the proposal to depute the Deputy Commissioner of Singbloom to visit Gangpore in the next cold season in the event of the Commissioner being unable to do so himself.

15. The Lieutenant-Governor is happy to learn that Tekait Dyanidhi, who has taken the place of his father, the Rajah of Bonai, on account of the latter's unsoundness of mind, has given the Commissioner much satisfaction in the discharge of his duties as Manager of the Estate.

16. The Lieutenant-Governor desires to record his acknowledgments to the Commissioner for his careful administration of these Mehals and for the interesting Report which he has submitted on them.

Correspondence relating to the suppression of Slavery in the State of Cooch Behar.

From LIEUTENANT-COLONEL J. C. HAUGHTON, Commissioner of Cooch Behar, to the Secretary to the Government of Bengal, — (No. 160, dated the 4th June 1864.)

THE existence of slavery in Cooch Behar has forced itself upon my attention in a manner which leaves me no alternative but to bring the matter at once to the attention of the Hon'ble the Lieutenant-Governor, and to solicit his instructions thereupon.

2. Recently complaint was made to me by an individual that he had sold a child to the Moharanees, lately acting as Regents, but had not received the price of it, Rupees 50. The child was stated to have been given to a Brahmin on the occasion of the late Rajah's shradh, celebrated for the first time six months after his decease.

3. I requested the Moharanees to explain this claim. In reply they informed me it had always been customary to give away slaves to Brahmins on the occasion of the funeral ceremonies of the Rajahs of Cooch Behar, and that they had acted in accordance with that custom, which, however, they admitted to be an evil one and promised not to continue it. The complaint was the result of a quarrel between the relatives of the child, one of whom had received the amount which the other thought himself entitled to.

4. I had reason to know from private sources that slavery was very general in Cooch Behar; I had in one case which came before me found a woman complaining that her husband had threatened to sell her to the Bootanese, and had been informed that the practice was not unfrequent. It appeared to me, therefore, likely to be of little advantage to commence formal or public enquiry, and that I should best learn the nature and extent of slavery in this country by compelling one of the Officials to furnish me with the information I desired, for it seemed probable that where all the better sort were more or less concerned no one would give evidence willingly. I therefore directed Anund Chunder Ghose, an old Officer of the State, Acting Sessions Judge and Serishtadar of the Raj Subha or Privy Council, to furnish me with a Report on the subject of slavery. Annexed* is a translation of this document, which exhibits a painful picture of the state of morality existing in the country by no means overdrawn.

5. The Judge of the Civil Court had a short time previously applied to me, (probably from hearing of the complaint which had been addressed to me,) stating that it had been customary to register sales of mankind in his Court, and desiring to know whether the practice was to be continued. As I was aware that the late Rajah had issued an order abolishing slavery, prospectively at least, though that order had not been recorded or carried out, I had no hesitation in prohibiting future registrations.

6. That the practice is one of old standing and attended with the greatest abuses will appear from the extracts† of correspondence of a former Commissioner annexed. The case of females is especially deplorable. It seems that children are sold by their unnatural parents even before their

birth, and that females, of the lower classes at least, are for ever liable to be sold and re-sold by their male relatives. I am informed that they are disposed of solely with reference to profit, without their wishes being in any way consulted, and by force. There appears to be no check whatever to prevent their being sold to the Bootas or other foreigners, and I cannot doubt but that such sales are frequent.

7. The Rajah no longer has slaves amongst his Military retainers, and it is not easy to determine exactly who amongst his servants are really such, as the Morungees and others holding land on service tenure are proud to call themselves slaves of the Rajah, as under cover of this title they have been in the habit of resisting all ordinary jurisdiction.

8. There can be no doubt but that the existing system of slavery, especially as it regards the women, must have a demoralizing effect on the whole people, the fathers and mothers being taught to disregard the duties they naturally owe to their own children, and relatives to all classes being taught to look with a covetous eye on the orphan children and widows whom the ordinary instincts of even the most uncivilized teach them to pity and support.

9. It seems to me impossible that the British Government could for an instant countenance such a system, or that any British Officer could be found to adjudicate and enforce claims to service of the loathsome*

* Vide Appendix B.

nature, the subject of a recent application to myself. It seems to me impossible that the Government should not only tolerate in a country which is by its Sunnud only a Zemindaree of Bengal practices highly penal wherever British Law prevails, but permit these practices to be enforced in Courts which profess to follow in the steps of our own, and which are for the most part administered by Natives of our own Provinces, Courts which could not exist but for the protection of the Government.

10. The evil is of long standing, but probably attained its height during the long period of misrule of Rajah Harinder Narain from 1800 to 1839 A. D., during which the Rajah not only abandoned the people to lawless violence, but indulged himself, without fear or scruple, in the practice of it. His son, Seebinder Narain, brought up in the School of Adversity, was a better man, and, it will be seen, made some attempt to prevent his subjects from being sold out of the country. The late Rajah's education had taught him to look with disgust at the practice, and I have no doubt but for the imbecile state to which he was latterly reduced by debauchery he would have put a stop to it. The real cause of his order not having been carried into execution was, I have good reason to believe, the outcry raised by the Ranees and females of the Palace, who were apprehensive that they would hereafter be unable to obtain servants. These apprehensions probably have

† Since writing this Moharane Nistarinee has reported to me that she has discharged six of her women, three married and three widows, who had taken voluntary service.

little foundation, as the Rajbaree is a refuge for women who consider themselves oppressed, and the condition of the Rajbaree servants, slaves, or otherwise, appears to be comfortable.

11. It is hardly possible to put a sudden and complete stop to the evil under notice; but I think measures may be adopted which will have

the effect of completely extirpating it during the minority of the present Rajah. I would respectfully suggest the following Rules for promulgation with the sanction of the Hon'ble the Lieutenant-Governor:—

1st.—That as the Government of Cooch Behar is professedly carried on in the spirit of the Laws of British India, it be declared that no right to the compulsory service of any person, not being a prisoner under sentence by duly constituted Judicial authority, exists with any other person.

2nd.—That all future sales of mankind, male or female, be prohibited, and the Courts debarred from recognizing them, nor shall any suit be admitted to enforce sales of time past.

3rd.—That the provisions of the Penal Code on the subjects of kidnapping be declared to be in force as regards all future seizures, sales, or detentions of persons, male or female.

4th.—That the foregoing Rules shall not affect the right of parents to bestow their daughters in marriage for the first time, or to receive usual presents on such occasion; nor shall they, in like case, affect relatives by custom entitled to take the place of parents, but that they shall be in force so far as to prevent the disposal of any female by marriage or otherwise a second time without her full and free consent.

5th.—That persons now holding others in bondage on account of actual money payments duly registered be called upon to register those claims within a fixed period, and that such persons shall have the right of recovering the amount actually paid under such Regulations as may be made on that head with the approval of Government.

12. In conclusion I think it right to say that, as far as I can ascertain, the Governor General's Agent has never been called upon to interfere with the question of slavery generally, but he did interfere in one individual's case, in which the restitution of a female slave was claimed. The matter was compromised by the girl's paramour paying her value.

13. Since the preceding portion of this letter was drafted I have received
* Vide Appendix D. a communication* from Chunder Nath Nundy fully corroborative of the statement made in the 10th paragraph of this letter, and forwarding copy of Rules which it was proposed to enact for the suppression of slavery. Copies are annexed.

A.

Report of BAHOO ANUND CHUNDER GHOSH, Acting Sessions Judge and Serishtadar of the Raj Subha, of Cooch Behar.

(After recapitulation of order in accordance with which Report is made.)

1st.—I cannot say how long the custom of man-selling has been practised, (in Cooch Behar,) but believe this evil usage has existed for a very long time.

2nd.—In this country man-selling is usual among four classes of persons:—

1st.—Fathers and mothers sell their daughters.

2nd.—Husbands sell their married wives.

3rd.—Priests and their disciples sell the slaves, male and female, they have acquired.

4th.—Persons falling into misfortune and in want of food are sold.

2. Besides the four sorts of sales named above—

Paternal uncles, elder brothers, brothers, fathers-in-law, husbands, brothers, elder and younger, and maternal uncles, &c., the relations in general are in the habit of selling. Besides all this, in this State there

are many sorts of persons who live acting as brokers in these evil transactions, and are perpetually on the look out for business. I am not able to state details of the traffic in town and country, but they may easily be obtained from the Police and those who transact business in the bazar.

3. On the Bootan border there are many people by means of whom the wives and children of the cultivators are secretly sold for very small sums.

4. There are many people who have fallen into misfortune who, by means of their relatives, have consented to become slaves to great men, and for this reason in the houses of great men in this and the bordering countries there are a great number of male and female slaves.

5. The custom of man-selling is equally practised by and between Hindoos and Mahomedans alike.

6. Hindoos and Mahomedans, alike fathers, mothers, and near relatives, sell their children to prostitutes, even before they are born, for small sums, and the purchasers occasionally register the bills of sale in the Civil Court; but I hear that from apprehension that the sales might not be recognized by the Courts many secret sales take place.

7. During the last thirty years the price of men (mankind) has been, I have heard, from Rupees 10 to Rupees 50. In illustration I submit a list of registered sales from 1256 to 16th Bhadro 1270, obtained from the Civil Court, and a list of children purchased, even after your arrival at this Capital, by prostitutes, which I have obtained from dealers in the bazar.

8. The old deceased Rajah (Harinder Narain, third predecessor of the present Rajah) gave permission for registry. Moreover, he farmed out the privilege to his Ranees Nagesures, now still living at Benares. Subsequently (his son) Moharaj Seebinder Narain in Joyet 1246 ordered that bills of sale of mankind should be registered in the Criminal Court, but the practice ceased after six months or a year, and the bills have since been registered in the Civil Court; but since the year before mentioned but few bills of the sort have been registered, moreover, one of the Sirkaree (Rajah) or Royal family sales (or purchases) of slaves are registered. It does not appear either that sales made by owners to other countries are registered; but sales of girls to prostitutes are found registered. A fee for registry of sales of mankind is taken at 5 per cent. *ad valorem*, and transcription fee of 1 per cent. in the Civil Court.

9. People without humanity or pity do not reason, and it is the custom for Mahomedans to sell their daughters to Hindoos, and *vice versa*. These they join to their own castes.

10. Rajah Seebinder Narain about 1248 or 1249 issued an order from the Raj Subha, which was generally published, that any owner of a slave, male or female, selling them to another country should be punished.

11. In Falgoon or Cheyt 1269 Rajah Nurinder Narain (deceased August 1863) called me one afternoon and said that the custom of selling mankind was a great evil, and that the British Government had long since put a stop to it in their territory, therefore he directed the practice should be stopped. This fact is known to all the Chief Officers. On account of the pressure of business the order was not issued, but it was certainly the intention of the Rajah to put a stop to the practice.

12. The practice of Suttee was prohibited before the time of Moharaj Seebinder Narain, but I myself have seen four or five Suttees. It may be called a kind of murder.

13. In Bengal it is the custom of Brahmins to marry many women, but such is not the custom here. The Royal family and Brahmins, besides their married wives, keep many concubines taken from all castes; these make their purchases for them in the bazar. On

account of this custom the population of the State does not increase.

14. There is another evil custom, after a girl has been betrothed formally to one man it is quite common for another more wealthy to seize her and carry her off by force. This is a cause of abundant complaint in the Courts. While such a state of things exists the people cannot be happy.

15. The Hindoo of this country make temporary marriages like the Mahomedans. If these things are put a stop to, it will tend to the benefit of the country.

B.

Extract of a letter from NORMAN MACLEOD, Esq., Commissioner of Cooch Behar, to GEORGE DOWDSWELL, Esq., Chief Secretary to Government, Fort William,—(dated the 31st January 1814.)

PARA. 16.—“One of these (specific grievances attended to in preceding paragraph) is the collections of dues and exactions under various forms, but fixed by no established standard, which are levied upon the cultivators of the soil, amounting in general with their rent to the enormous proportion of three times the sum which they are bound by their agreements to pay for the use of their land. To explain this and its effects by an instance of unhappily no imaginary or even extraordinary occurrence: A Ryot takes a pottah for so many beegahs of land, agreeing to pay Rupees 20 per annum in rent for them, and he hopes perhaps by his labor to make the produce of his land yield him sufficient to enable him to discharge his rent, and afford him a surplus of possibly Rupees 20 for the maintenance of himself and family. By the time, however, that he has tilled his ground and his crop begins to rise, he finds that the demand for dues in various shapes are made upon him, amounting altogether to Rupees 40 over and above the sum of his stipulated rent. His utmost efforts cannot possibly enable him to answer these demands, they are pressed upon him with urgency, and exact from him his utmost mite, that mite, however, will not suffice, and, to add to it, he sells children, and probably prostitutes his wife by disposing of her in mortgage. Yet all may not avail him, the rapacity of his oppressor may be still unsatiated, and loss of life should follow that of family and property, he flies from his home and country.”

From NORMAN MACLEOD, Esq., Commissioner of Cooch Behar, to GEORGE DOWDSWELL, Esq., Chief Secretary to Government, Fort William,—(dated the 9th February 1814.)

PARA. 3.—“These extraordinary retainers, Burkundauze and Sepoys, are not only altogether superfluous, but as they scarcely ever receive any regular pay, they plunder the country for their own subsistence, and are also very active instruments in the hands of the Rajah's Amlah. Their attendance, moreover, about the person of Harinder Narain impresses his mind, in his present state of imbecility, with very false and preposterous notions of his consequence and power, and I must not fail to add that one of these supernumerary companies of Sepoys, which consists partly of slaves, is regarded by the Rajah, and by his subjects also, as devoted with peculiar servility to his will and purposes, and it was to the care of these men the unfortunate Hurris Chuckerbutty was committed (being taken from under the guard of Regular Sepoys) on the day before his disappearance.”

A subsequent Report, dated 11th August 1814, details the mode in which the Sepoys above referred to were employed in the murder of Hurris Chuckerbutty and the disposal of body.

C.

Petition of SREE TOOLSEE, Prostitute, to the Commissioner of Cooch Behar.

I BROUGHT a girl, named Anund, when she was very young, and instructing her in various ways. When she attained puberty, by the exercise of the “science of whoredom,” she earned money and supported me. One day by some one's evil advice she ran away with my property. I complained in the Criminal Court. She then came to me and, declaring that the property was lost, granted me a bond for the value of it. I then withdrew the charge and brought her into my own control into my own premises. Subsequently the Rajah's khansama, Joteeram Doss, having agreed to pay me Narainy Rupees 9 monthly as the hire of the girl, was in the habit of visiting her. He subsequently took her to his residence, allowing her to visit me when she chose, and paying me portions of her hire. Hearing that he was about to return to his country I demanded the girl, and Rupees 150 or 175 of her hire still due, but he has put me off with promises and is about to flee the country with the girl. As he is servant of the Government, instead of applying the Criminal Court I appeal to you to cause the girl to be given up and her hire paid to me.

D.

DRAFT ORDER OF HIS HIGHNESS THE MAHARAJAH.

Rules for abolition of Slave Trade in the State of Nij Behar, published at the Sessions of the High Court in the year 353 Saka corresponding with 1260 B. S.

It appears that the custom of slave-dealing is prevalent in this State, but this is a very illegal* and wrongful act, for it is not the intention of God that the man who has been created by him should sell his brethren and keep them for life as slaves under him. The power with which mankind are invested in regard to the sale of cows, asses, and other animals cannot be properly exercised over their fellow-creatures. In short, the act is not at all reasonable and is adverse to the will of our Creator, and is thought cruel. Considering, therefore, that the custom ought to be stopped; it is enacted as follows:—

1st.—That whoever, after promulgation of this Rule and the present date, will sell or purchase any man for the purpose of employing him as slave (whether male or female) within this Raj; sell to others or beyond this State, or will accept or employ persons as slaves (whether male or female) without their consent, will be liable to rigorous imprisonment for a period not exceeding seven years.

2nd.—Whoever will buy and remove persons to any place from this State, or will import or export slaves, (whether male or female,) or will purchase or sell them, will be imprisoned for life.

3rd.—Whoever will sell, or hire out, or confer upon by gift a girl who has not reached maturity with the intention to engage her into the usages of a prostitute, or in other hateful or immoral acts, or knowing the probability of her being engaged in those acts, will be rigorously imprisoned for a period not exceeding ten years.

4th.—Whoever will purchase, or hire, or receive, and accept in any way a girl who has not reached maturity with the intention to engage her in the usages of a prostitute, or in other hateful or immoral acts, or knowing the probability of her being engaged in those acts, will be imprisoned rigorously for a period not exceeding ten years.

5th.—All Officers should try themselves to put a stop to the above occurrences, but whoever will conceal the fact, knowing that the crimes hereby prohibited have taken place, or are likely to take place,

that is to say, who will not report regularly of the above fact before His Highness, will be liable to a punishment the moiety of what is already fixed for the said crimes; a period of ten years will be concluded as moiety of the imprisonment for life.

6th.—Whoever will aid the commission of the crimes specified above will be liable to the full punishment ascertained for those offences.

7th.—These Rules will be in force from 1st proximo.

8th.—Copies of this will be sent to the subordinate Courts for information; the chief Officers shall hang a copy of these Rules in a public place in each Office for general information. The Ahilkar of Fouz-daree should furnish the Darogahs and Mohurirs of each Thannah and Pharie (Police Station House) with a copy, directing them to circulate it in the markets during two weeks. The Ahilkar will also report after due circulation of the same.

From the Secretary to the Government of Bengal, to the Commissioner of Cooch Behar,—(No. 928T., dated Darjeeling, the 23rd June 1864.)

I AM directed to acknowledge the receipt of your letter, No. 160, dated the 4th instant, regarding the existence of slavery in Cooch Behar, and the extent to which it is carried; and in reply to state that the Lieutenant-Governor approves of the Rules you propose to issue for its suppression.

2. The Sections of the Penal Code should be mentioned in Rule 3, which should run as follows: (3.) That the provisions of Sections 359 to 374 of the Penal Code relating to kidnapping, abduction, &c., be declared to be in force as regards all future seizures, sales, or detentions of persons, male or female.

3. You should also add another Rule directing that no sales of human beings shall be registered in any public Office. These measures will, in effect, be merely carrying out the benevolent intentions of the late Rajah.

From the Under-Secretary to the Government of India, to the Secretary to the Government of Bengal,—(No. 755, dated Simla, the 25th July 1864.)

WITH reference to your docket dated 23rd ultimo, No. 928T., I am directed to inform you that the measures taken by the Government of Bengal for the suppression of slavery in Cooch Behar are entirely approved by His Excellency the Viceroy and Governor General in Council.

Minute on the sale of unwholesome Food and Drink in Calcutta, and Measures required for the protection of the health of Seamen.

By the President of the Sanitary Commission for Bengal.

THE attention of the Commission has been drawn to a Lecture delivered a few months ago by Dr. Chevers "On the preservation of the health of Seamen, especially of those frequenting Calcutta and other Indian Ports."^{*}

The account, which Dr. Chevers, one of the highest Authorities on such subjects, has given of the condition of the lodging houses and drinking shops

in Flag Street and in the adjoining lanes, and of the quality of the food and drink sold there, is such that it ought not to be passed over in silence by this Commission.

2. Dr. Chevers states that he has made much enquiry regarding the fermented and spirituous liquors sold to European sailors and soldiers in the Calcutta Bazaars. The following quotations are taken from his pamphlet:—

"The liquor-shops in the Lall Bazar, Bow Bazar, Rada Bazar, and at the end of Chitpore Road, opposite the Town Guard, are very numerous, and at some of them European Policemen are constantly posted to maintain order. There are also some in College Street. A place called 'The Numbers' (several small but very active liquor-shops numbered from 1 to 8 or 10 in Rada Bazar) is very notorious. In most of these shops the Mudut and Doasta, the most unwholesome Native liquors, are sold in their simple form; in others they are disguised, being poured out of English bottles labelled as 'Old Tom,' 'Exshaw's Brandy,' &c., &c. The common price of a glass of liquor, spirit of any kind, or wine, is two annas. The liquor sold at this rate, as English, is believed to be entirely factitious. What are stated to be better liquors, such as 'Exshaw's first class Brandy,' are sold at four annas the glass. The best country Rum may be obtained at present for Rupees 3-12 per gallon retail in Calcutta. One well acquainted with the practices of the bazar-shops has just brought me three bottles, one of undiagnosed Doasta, price from 12 to 14 annas the quart bottle retail. The bottle has a glass stamp, 'T. Hine and Co., Champagne Cognac.' Second.—A brandy bottle without brand containing colorless Bengal Rum, price one Rupee the quart. Third.—A liquor stated by the retail dealer to be Ahmuty's Rum, put up—(not, of course, by that respectable house)—in a small French bottle, with a superbly emblazoned and quite new-looking label,—'General Society of Vineyard Proprietors' Cognac, A. Nior, A. Faltein Fils & Co., Managers.' The price of this is one Rupee.

"The sale of condemned beer from the Government Stores is strictly prohibited by Regulation, but it is certain that some Calcutta houses are not sufficiently scrupulous in refraining from the sale of poisonously damaged liquor. I am assured, from various reliable sources, that beer is obtained in the bazar at from a Rupee to eight annas a dozen now that bottles are almost valueless! It has long been believed that sailors and soldiers are sometimes hounded with liquor containing datura, &c., and some enquiry has been made into this question. Several men, suffering from the effects of intoxication, have declared to me their belief that their liquor had been drugged. I have, however, met with far more suspicious cases in Natives.

"The liquor sold in Flag Street is of the most deleterious quality—a cheap rice spirit, distilled by the Natives in a simple apparatus formed of two large earthen vessels communicating by a bamboo tube. This Bazar Sharab, Rum, or Doasta is in itself poisonous on account of the large quantity of fusel oil which it contains, and is adulterated and doctored in a variety of ways by the dealers, who, it has long been believed, have a practice of drugging it with datura, cocculus indicus, gunja, or some other narcotic. It is certainly remarkable that, while in our European sea-ports our soldiers and seamen drink adulterated spirits

^{*} Published at the "Military Orphan Press," Calcutta, 1864.

recklessly without incurring any danger of sudden death, it is common, in Calcutta, even in the cold season, when there can be no suspicion of insolation, to find an unfortunate European, who has evidently proceeded some distance towards his ship, lying upon his face, dead by drink apoplexy. I believe that, some months since, on the occurrence of many very suspicious cases, a quantity of the bazar spirit was examined for *daturine*. None was discovered, but the suspicion that this practice of 'hoccussing' is common in the bazar is still unshaken."

The Grand Jury of Calcutta in a special Presentment to the Supreme Court in December 1862, on the subject of the increase of crime from drunkenness in the bazars, observed as follows:—

"They had seen with much regret the cases brought before them arising out of drunken affrays among European Sailors, and assaults by them on unoffending people, and conflicts between them and the Police, one of such cases having, unfortunately, terminated in loss of life. That, while the Grand Jury feel that such outrages reflect much discredit on the character of European sailors, and will draw on the perpetrators well deserved punishment, they believe that much of this evil arises from no sufficient means having yet been taken to prevent the sale of adulterated or poisonous liquors, which either stupify or madden those who drink them. The Jury believe that this is an evil which has increased and is increasing, and which might, by proper precautions, be diminished, if not put an end to."

3. Dr. Chevers states that he has been told that the food sold to the sailors "is generally bad,—mostly the diseased bazar pork, which none but the very poorest willingly eat; indeed, it is only by great and constant care and watchfulness that well-to-do people in this City avoid having unwholesome food brought to their tables." Having lately visited the public slaughter-houses, and seen the condition of many of the cattle there, I can quite believe that the latter part of this statement is correct.

4. In letter No. 684, dated 30th ultimo, from the Secretary to the Justices of the Peace for the Town of Calcutta to the Secretary to the Sanitary Commission, in reply to enquiries made upon this subject, it was stated that regulations for the management and inspection of markets were under preparation by the Health Officer, but that "no instance has yet occurred of the grant of a warrant for searching for and seizing unwholesome food and drink, or to enter and inspect markets, buildings, &c., for the same purpose."

5. It may be hoped, from this letter from the Secretary to the Justices, that measures for remedying the great evils that have been described are already in progress or in contemplation, and I understand that since that letter was received actual seizures of unwholesome food have been made on the representations of the Health Officer. As, however, the subject has come under the consideration of the Sanitary Commission, it appears proper that we should state to the Municipality our opinion that systematic action in this matter is urgently called for. It is clear that there ought to be a proper permanent Establishment appointed for the protection not only of European Sailors and Soldiers, but of the public generally in this respect, and for the systematic inspection of food and drink exposed for sale.

6. Ample powers are given to the Justices by Sections 200 and 201 of the Calcutta Conservancy Act to search for and seize unwholesome food or drink which is in the possession of any person for the purpose of being sold; and Sections 272 and 273 of the Penal Code contain severe penalties against persons guilty of adulterating food or drink intended for sale, or of selling noxious food or drink. There seems, therefore, no difficulty, so far as the Law is concerned, in dealing with the subject.

7. The question of public slaughter-houses for Calcutta and its Suburbs, and for the Troops, has been taken up by the Commission separately and need not be again referred to here.

8. I take this opportunity of noticing an important subject closely connected with those to which reference has been already made in this Minute.

In the Pamphlet before noticed Dr. Chevers has shown that the annual mortality among sailors in Calcutta is enormous. He estimates the death-rate, from the best obtainable data, to be 96.48 per 1,000 annually, a rate which, as he says, is "terrible, and, in the present day, almost unexampled,—a very near approach to annual decimation, or total extinction in ten years." A large proportion of this excessive mortality is due every year to cholera, and, as Dr. Chevers has noticed, there is strong reason for believing that much of this is caused by drinking the filthy water of the river. I make the following quotation from the Report of the Cholera Commission:—

"Much has been said in Europe regarding the propagation of cholera by impure drinking water, and the evidence that has been produced to show that this has in some cases happened appears so strong, that it is hardly possible to dispute it. * * * *

"Some of the facts stated in Dr. Hugh Macpherson's Paper on the mortality of Calcutta appear to have a very important possible connection with this subject. We find that in the five years ending with 1860 there were 716 deaths from cholera among the European Protestant population of Calcutta. This was one-fourth of the deaths recorded from all causes. Of these 716 deaths 76 per cent. occurred among the floating population, consisting chiefly of sailors visiting the port. There has been no census—a little creditable fact—and no actual comparison between the liability of the resident and floating population to the attack of cholera is possible; but there can be no doubt that the greater mortality among the sailors is out of all proportion to their numbers. It appears, too, that in the five years in question out of a total number of 1,170 deaths, from all causes, among the European floating population, no less than 46 per cent. occurred from cholera, while among the resident male population, out of a total number of 822 deaths, only 13.7 per cent. were due to that cause. The existing data are altogether insufficient to enable us to explain these facts, but it is impossible to avoid the supposition that the character of the water which the sailors consume may have much to do with them. Cholera reaches its maximum, as we have already shown, among the Native population in April, and May is the most fatal month to the sailors. The river is then at its lowest, and the water, which is at all times excessively impure, reaches its maximum of organic contamination. The tonnage of shipping in the port is at this season

much below the average of the year, and the number of sailors is probably not far from its lowest point.

"Although," writes Dr. Hugh Macpherson, "cases of cholera will occur at times in all parts of the harbour in spite of every precaution on the part of Captains of ships, and of steadiness and sobriety on the part of the crews, certain moorings are more obnoxious to the disease than others. The localities indicated are—Colvin's Ghaut, which is close to the mouth of the great sewer,—Thompson's Ghaut,—Tolly's Nullah,—the Cooly Bazar,—Fort Point,—and Armenian Ghaut. Having taken some trouble to collect evidence on this head from the Marine Authorities, as well as from Dr. Woodford, Police Surgeon, and other Medical men who have much to do with the shipping, I have arrived at the conclusion that no one of the moorings indicated is always infested with cholera; nevertheless, when the complaint is prevalent, it is sure to show itself with special virulence at one or more of these places. They are, in short, the favourite haunts of this most unwelcome visitor. Any of the moorings may remain free from cholera for a year or two, but it is sure to return; and the collective testimony of those who were good enough to favour me with their opinion on the subject, tends to show that the moorings just below Colvin's Ghaut are, as regards cholera, the worst of any, the ship lying nearest the bank being liable, here as elsewhere, to suffer most severely as a general rule, though it occasionally happens that the nearest ship escapes while the one lying second or third off is violently attacked. At the same time it should be stated that the disease is often seen in a severe form in other spots than those just named,—at the Esplanade moorings for example, which are usually healthy.

"These remarkable facts, which the inquiries of Dr. Hugh Macpherson have brought to light, afford another good example of the neglect with which matters affecting in the highest degree the public health have hitherto been treated in India."

There are obvious difficulties in dealing with this subject, but there is no reason for assuming that nothing can be done. I believe that at present neither the Captains of ships nor the crews are at all generally aware of the great danger to which they are probably exposed by drinking the water of the river. Further enquiry will be necessary before the Commission can say what are the principal remedial measures that ought to be taken or attempted, but the question is one which appears very important, and it ought not to be allowed to drop.

10. There are other matters affecting the health of seaman in Calcutta noticed in Dr. Chevers' Pamphlet which demands the attention of this Commission, but it will be better to notice them separately. I wish to add that I hope that nothing in this Minute will be construed as an attack upon the Calcutta Municipality, for nothing could be further from my intention. The existing Municipal body has, I believe, done more in the last few months towards the permanent improvement of the sanitary condition of the Town than was ever done previously.

J. STRACKEY,

President, Sanitary Commission for Bengal.

CALCUTTA,
The 2nd May 1864.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Secretary to the Sanitary Commission for Bengal,—(No. 2547, dated the 18th July 1864.)

With reference to your letter No. 243, dated the 2nd May last, and its enclosures, I am directed to forward, for the information of the Com-

mission, a copy of the correspondence* showing the result of an investigation made in 1857-58 into the quality of Calcutta Bazar liquors.

2. It will be observed that it was then conclusively proved by actual chemical analysis that the liquor sold in the Bazar was not drugged but diluted, and that the excessive drunkenness and its results among the soldiery resorting to the Native Shops was due rather to the quantity than the quality of the liquor drunk in them.

3. I am further to observe that as an inducement to the consumption of Rum in preference to Doasta the Duty on both liquors was equalized. The result obtained has been most favorable, for to the increased use of Rum is attributed the marked decrease of late in the deliveries of Native Spirit from the Distilleries. No Doasta, I am to explain, can be consumed in Calcutta except such as is distilled under surveillance at the Manicktollah Distillery, which is open to the inspection of the Commission.

4. I am also to forward, for the information of the Commission, a copy of the correspondence† relating to the measures taken for supplying water to the shipping of this Port by means of Iron Tank Boats constructed at the Government Kidderpore Dock Yard.

5. It will be observed that two Iron Boats were originally constructed for supplying water to Vessels which conveyed Emigrants to Mauritius and to the West India Colonies. One of these Boats was subsequently sold as it was not required. The fees, however, derived by the remaining Tank Boat from Emigrant Vessels only were not sufficient to cover the cost of its Establishment; it was consequently made generally available for supplying water to Troop Ships and Government Transports at a charge of Rupees 1-8 per ton. The last Report from the Master Attendant showed a balance in favor of the Boat after paying all charges.

From COLONEL R. J. H. BIRCH, Secretary to the Government of India in the Military Department, to the Officiating Chief Commissioner of Police,—(No. 69, dated the 2nd December 1857.)

It having been brought to the notice of Government that liquor of a very deleterious quality is sold to the European Soldiers in the Town of Calcutta, I am desired to request that you will have the goodness to secure samples of this liquor from several shops in order that they may be analyzed by the Chemical Examiners to Government, who has been instructed to report the result to this Department.

From S. WAUCHOPE, Esq., C. B., Commissioner of Police, Calcutta, to the Secretary to the Government of India, Military Department,—(No. 955, dated the 3rd December 1857.)

I HAVE the honor to inform you, in reply to your letter No. 69 of the 2nd instant, that I have sent several bottles of liquor brought by persons in disguise from the liquor shops most frequented by Soldiers to the Chemical Examiner for analysis.

2. I have very frequently had this liquor examined but nothing has been found further than that the spirit is badly distilled and diluted with water.

From S. WAUCHOPE, Esq., C. B., Commissioner of Police, Calcutta, to the Secretary to the Government of India, Military Department,—(No. 1010, dated the 16th December 1857.)

In continuation of my letter No. 955 of the 3rd instant, I have the honor to forward the annexed copy of a letter from the Chemical Examiner to Government, reporting on the samples of liquor forwarded to him by me in compliance with the instructions contained in your letter No. 69 of the 2nd instant.

2. The result is as I anticipated and stated in my letter above quoted.

From DR. F. N. MACNAMARA, Chemical Examiner to Government, to S. WAUCHOPE, Esq., C. B., Commissioner of Police, Calcutta,—(No. 520, dated the 15th December 1857.)

With reference to your letter dated the 5th December, I have the honor to report the results of my examination of the sixteen samples of bazar spirit forwarded therewith.

These samples contain none of the adulterations which are commonly added to spirits in England by the retail dealers, nor can I discover that anything, beyond water, has been intentionally added to any of the samples in question.

All the samples contain but a small percentage of Alcohol, none of them more than half the percentage that should be present in an undiluted spirit. Several of the samples contain considerably less than that.

About half the number of the samples are more acid than a Government spirit should be; this is a fault common to all badly manufactured spirits.

Many of the samples have the taste and smell of raw, ill-refined, spirits. Such a spirit, if of the proper strength, would be more intoxicating than a pure spirit. But in these samples the additional intoxicating power, derived from the impurity, must be neutralized by the dilution of the spirit.

I believe that the great amount of intoxication which we have lately witnessed amongst the European Troops has been owing, not to the quality but to the quantity of the spirit which many of them have consumed, and to the circumstances under which it has been drunk.

Results of the late Bengal Agricultural Exhibition and Arrangements for future Shows.

Extract from the Proceedings of the Government of India in the Home Department, Simla,—(No. 1662, dated the 29th July 1864.)

Read again the following papers on the subject of the Agricultural Exhibition held at Alipore in January last :—

1. From Government of Bengal, No. 1401, dated 24th March 1863, and enclosures.

2. Resolution, Home Department, No. 2688, dated 28th April 1863.

3. Resolution, Financial Department, No. 2010, dated 13th May 1863.

Read a letter from the Junior Secretary to the Government of Bengal, No. 2509, dated 31st May 1864, enclosing the Report and Accounts of the Central Committee, together with a Minute by the Hon'ble the Lieutenant-Governor, dated the 21st idem.

RESOLUTION.—The Governor General in Council has perused with much satisfaction the Report of the Central Committee, and he fully concurs with the Lieutenant-Governor in his estimate of the general success and the excellent results of the Exhibition.

2. Four propositions are submitted for the sanction of the Government of India, *vis.* :—

1st.—To write off Rupees 30,000 out of the Rupees 50,000 advanced on account of the expenses of the Exhibition in May 1863.

2nd.—To expend a sum not exceeding Rupees 30,000 annually for Local Agricultural Shows in Bengal, to commence with the next cold season.

3rd.—To hold a Central Agricultural Exhibition in Calcutta every three years.

4th.—To hold a General Industrial Exhibition at Calcutta in 1869-70.

3. With reference to the first proposition the Governor General in Council remarks that at the time the advance of Rupees 50,000 was made it was expected that the amount would "probably be covered by the payments to be made by the public for admission to the Exhibition." The papers now submitted by the Government of Bengal, however, show that the Exhibition grew far beyond the limits at first intended, and that the expenses were proportionably increased. Although, as stated by the Lieutenant-Governor, the amount directly contributed by the public was considerably more than was anticipated, the excess of disbursements over receipts has amounted to about Rupees 30,000, and it is to write off this sum that the sanction of the Governor General in Council is solicited. His Excellency in Council entirely concurs in the remarks contained in the 4th paragraph of the Lieutenant-Governor's Minute and in His Honor's opinion that this expenditure of £3,000 is well justified by the results obtained. This proposition will, therefore, be referred to the Financial Department for the necessary formal sanction.

4. As regards the second proposition to expend a sum not exceeding Rupees 30,000 annually for the promotion of an Agricultural Show in each of the ten Divisions of the Lower Provinces, the Governor General in Council is willing to sanction at once the proposed outlay for the first year, and to promise, subject to consideration in each year with reference to the state of the general finances,

that it shall be renewed, so far as may be requisite, in the following years, if the result of the Local Exhibitions shall be such as to lead the Lieutenant-Governor and the Governor General in Council to the conclusion that the expenditure is useful and beneficial. The Governor General in Council observes that if the Divisional Reports are received by the Lieutenant-Governor within six weeks of the closing of the Exhibitions, there will be ample time to decide on the character of the results obtained before it is necessary to advertise the Exhibitions of the ensuing year. Indeed it may happen that modifications will recommend themselves to the Lieutenant-Governor, as for instance, possibly the union of two or more of the Divisions, so as to have a smaller number of Exhibitions, or any other change. Also it may appear that so large a contribution by the State will not be required even in the second year. For the Governor General in Council is glad to perceive that the Lieutenant-Governor asks for a grant not exceeding Rupees 30,000, and that he would have it understood that these Shows shall eventually be self-supporting. The necessary formal sanction on this point also will be accorded in the Financial Department.

5. As the Lieutenant-Governor expects that the Triennial Central Agricultural Exhibition in Calcutta will be self-supporting from the outset no orders seem required from the Government of India.

6. The fourth and last proposition submitted by the Lieutenant-Governor, namely to hold a General Industrial Exhibition at Calcutta in 1869-70, is one which the Governor General in Council will submit, with his cordial support, for the sanction of Her Majesty's Government.

ORDERED, that a copy of the above Resolution be sent to the Government of Bengal.

Circular from S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to all Commissioners,—(No. 3593, dated the 23rd August 1864.)

I AM directed by the Lieutenant-Governor to forward, for your information, a copy of a Resolution, No. 1662, dated the 26th ultimo, recorded by His Excellency the Viceroy and Governor General in Council, in the Home Department, on the results of the late Bengal Agricultural Exhibition, approving of the proposal made by His Honor in his Minute of the 21st May, published in the supplement to the *Calcutta Gazette* of the 6th ultimo, to hold a Triennial Central Agricultural Show at Calcutta, and an Annual Local Show for live stock and the products of agricultural labour in each Division of the Lower Provinces.

2. I am to draw your attention to paragraphs 15, 16, and 17 of the Lieutenant-Governor's Minute, and paragraph 4 of the Resolution of the Government of India, and to request that you will

take immediate steps towards holding a Cattle* and Produce Show during the coming cold season at some place within your Division which, in all respects, may seem to you best suited for the purpose. The Reports of the Central Committee of the Calcutta Exhibition, and of the Judges, contain a valuable mass of information and suggestions which will no doubt be sufficient for your guidance.

3. You should, I am to say, associate with yourself a Committee of gentlemen, English and Native, residents of the Division, who take an interest in agricultural matters, and whom you may consider likely to give you useful aid in carrying out the project.

4. You should address the District Officers of every District in your Division and require them, in like manner, to avail themselves of the assistance of such Officers and other residents of the District as may be disposed to co-operate and promote the object in view.

5. The Divisional Committee, with the Commissioner at its head, should undertake the management of the Show and make all arrangements necessary for its success, and for the convenience both of contributors and of the public they should invite the co-operation of all the principal Landholders and other gentry in the Division, encouraging them to exhibit the produce of their Estates, to contribute towards the expenses of the Exhibition, and to be present at it with as many of their tenantry and dependents as they can conveniently assemble; and they should afford full information to the public as to the nature and objects of the Show, the conditions to be observed by Exhibitors, and the prizes and other rewards to be competed for. The prospectus of the Show, including the prize lists and other necessary particulars, should be published in the *Calcutta and Vernacular Gazettes*.

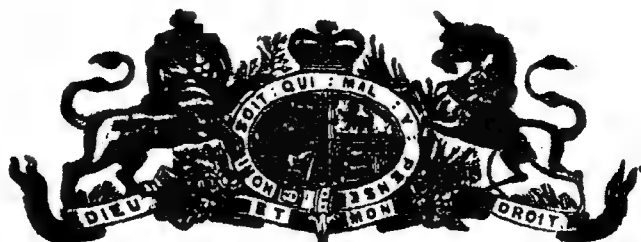
6. The District Committees should in like manner make known in their several Districts all particulars relating to the Exhibition, encourage the Landholders and Agriculturists to come forward in support of it, give all facilities to Exhibitors for the transport of their produce, and generally co-operate with the Divisional Committee in promoting the success and utility of the Exhibition.

7. I am to point out that the grant of Rupees 3,000 on the part of the Government is a maximum sum, not on any account to be exceeded, and that it is expected that at least an equal sum will be raised by the public. It is to be hoped, however, that a large sum than this will be contributed by those who are more immediately interested in the results of the Exhibition, and that the amount subscribed, added to what may be collected from the sale of admission tickets, will enable the Divisional Committee to offer liberal prizes for all sorts of produce, and to make all suitable arrangements for the occasion.

8. You will be so good as to report, as soon as possible, the place and time at which it is intended that the Exhibition should be held, and the other arrangements that may be made in pursuance of these instructions.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Honorary Secretaries, Bengal Agricultural Exhibition,—(No. 3594, dated the 23rd August 1864.)

In continuation of my letter No. 2508, dated the 31st May last, I am directed by the Lieutenant-Governor to forward, for your information, a copy of a Resolution, No. 1662, dated the 26th ultimo, recorded by His Excellency the Viceroy and Governor General in Council, in the Home Department, on the results of the late Bengal Agricultural Exhibition.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, SEPTEMBER 7, 1864.

OFFICIAL PAPERS.

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State of the Salt Market during the 1st Quarter of 1864-65.

From H. T. PRINSEP, Esq., Officiating Junior Secretary to the Board of Revenue, Lower Provinces, to the Secretary to the Government of Bengal,—(No. 697, dated the 12th August 1864.)

I AM directed by the Board of Revenue to submit the following report on the state of the Salt market during the First Quarter of 1864-65.

2. The quantity of Government Salt sold under Rowannas issued by the Board amounted to maunds 1,14,625, as shown on the margin, giving a monthly average of maunds 38,208, or maunds 128 in excess of the average during the previous quarter. This slight increase is owing to the sales in May and June having been larger than the ordinary sales of late, under an impression which prevailed among the dealers that the price of Government Salt would be raised on the annual revision of prices.

3. The sales of Government Salt from the Ghoseery Golahs were 2,985 maunds against 2,125 maunds in the previous quarter; from the Hidgellee Depôts 15,775 maunds against 16,400 maunds; from Narainpore (Tumlook) 90,565 maunds against 93,516 maunds; and from Chittagong 5,300 maunds against 2,200 maunds.

4. During the quarter 11,885 maunds of Excise Salt were sold; in the previous quarter the sales were 13,045 maunds.

5. The quantities of Salt which have passed the border Chowkeys of Ballikhal on the Hooghly, and Gorahghaut en route to the Gorai, and which have been despatched into the interior of the country by Rail, are shown in the following

Comparative Statements. Baboogunge and Gopalgunge, which have hitherto been entered in these Statements, were respectively the border Chowkeys on the routes up the Hooghly and to the Gorai, but they have been closed under Government Order No. 1006, dated 11th March 1864, as being situated out of the saliferous tract. The present border Chowkeys are Ballikhal and Gorahghaut.

Period.	Quantity of Salt which has passed Ballikhal up the Hooghly.	Quantity of Salt which has passed Gorahghaut en route to the Gorai.
	Maunds.	Maunds.
1st Quarter of 1862-63	6,05,351	56,370
" of 1863-64	6,89,598	77,320
" of 1864-65	8,04,576	79,293

Period.	Quantity of Salt despatched by the East Indian Railway.	Quantity of Salt despatched by the Eastern Bengal Railway.
	Maunds.	Maunds.
1st Quarter of 1862-63	1,12,321	...
" of 1863-64	1,43,821	18,065
" of 1864-65	1,46,294	9,518

6. The importations and clearances of Sea-imported Salt are shown in the following Comparative Statement:—

Kind of Salt.	1862-63. 1st Quarter.		1863-64. 1st Quarter.		1864-65. 1st Quarter.	
	Imported.	Cleared.	Imported.	Cleared.	Imported.	Cleared.
Liverpool Pungah	17,47,336	10,90,973	16,11,518	12,78,587	10,31,763	15,28,812
Foreign Kurkutch	41,764	1,01,628	92,117	1,471	52,364	1,77,560
Indian	1,07,040	2,81,754	1,08,658	2,32,831	3,31,389	3,04,885
Ceylon	...	18,426	52,062	40,952	762	...
Total	18,96,140	14,92,781	18,64,355	16,13,841	14,16,278	20,11,257

The importations, it will be perceived, fell short of those in the preceding quarter and the corresponding quarters of 1862-63 and 1863-64, while the clearances show a marked improvement.

7. The shipments of Liverpool Salt appear, from private advices, to have been in April 1864 ... Tons 19,571

May	"	...	"	22,219
June	"	...	"	27,553

Total Tens... 69,333, or maunds 18,87,398.

When the Mail of the 11th July left England 15,203 Tons, or maunds 4,13,859, were in course of being shipped for export to this country.

8. The price of Liverpool Salt rose from Rupees 46 per 100 maunds in the beginning of May to Rupees 60 at the end of the month; in June the fluctuations were between Rupees 61 and 59; and by the end of July the price fell to Rupees 52. Madras Kurkutch Salt, which was selling in the beginning of May at Rupees 45, rose by the middle of the month to Rupees 50, in the last week the price was Rupees 48, in June it rose again to Rupees 50, but fell at the end of the month to Rupees 45, in July the fluctuations were between Rupees 40 and 47, at the close of the month the quotation was Rupees 45. The price of Bombay Salt in May ranged between Rupees 40 and 43, in June between Rupees 28

and 40, and in July it fell gradually from Rupees 22 to 27. The price of Excise Salt continued at Rupees 95.

9. Under Government Order No. 901T., dated 20th June last, the prices of Government Salt have not been subjected to the usual annual revision; the prices are the same as those published on the 9th May 1863.

10. The following Statement shows the quantities of Salt available for exportation on private trade at the several Madras Depôts on the first day of each of the three months of the quarter compared with the corresponding dates of the previous year:—

Dates.	1863.	1864.
	Maunds.	Maunds.
1st May	8,95,822	5,67,760
1st June	11,80,662	6,70,720
1st July	8,52,264	5,48,044

Cultivation of the Quiniferous Cinchona at Darjeeling.

Report on the cultivation of the Quiniferous Cinchona at Darjeeling from the 1st April 1863 to 15th July 1864 by T. ANDERSON, Esq., M. D., Superintendent of the Botanic Garden, Calcutta.

THIS Report refers to the operations of a longer period than can be strictly included in the official year; but I have extended the period reported on to enable me to lay before the Lieutenant-Governor, in the compass of one Report, my proceedings up to this date in this important experiment.

The period to which this Report refers may be considered as the second year of the experiment of cultivating Cinchonas in the Himalaya, as the cultivation was commenced on the 1st June 1862. In the first Annual Report submitted on the 3rd August last year I referred to the numerous obstacles that had to be overcome before commencing the cultivation,* as well as the difficulties that still continued to retard the more rapid increase of the stock of plants. Through more extended acquaintance with Darjeeling I have been able successfully to contend with many of these difficulties; but I am sorry to have to report that all my operations have been retarded and much unnecessary labour incurred by the want of permanent buildings belonging to the cultivation and situated on Government land near the site chosen for the open air cultivation. The propagation of the plants is still carried on at Lebong in a private garden, which I have been obliged to rent for a second year, that is, until the end of April 1865. This garden, besides a dwelling-house occupied by the European Gardener in charge of the cultivation, had not a single appliance of any kind for carrying on cultivation beyond a small conservatory manufactured out of old doors and windows, and so dilapidated that it had to be abandoned six months ago.

In its place a temporary conservatory, consisting of a glass roof and wooden sides, was erected in January. The glass and wooden frames for this conservatory were sent from Calcutta, as it was impossible to procure them in Darjeeling.

On finding that the nurseries could not be removed to the permanent site till the end of another year I made arrangements for adding a flue to the conservatory erected in January, and also for building a second conservatory with a flue. This second conservatory was completed about fifteen days ago, and the flue of the other house is also finished. These flues, though not required at this season, will be an invaluable aid in carrying on the propagation during the coming winter. Owing to the want of artificial heat propagation was almost entirely stopped during the winter months. Twenty-five large frames with glass lights, and of the form usually known as cucumber frames, were provided during the last year to meet the large increase in the number of plants. The rooting of the cuttings has always been carried on in these frames with the assistance of slight bottom heat obtained from the decay of heaps of vegetable matter. A large number of additional frames will be required almost immediately, as the rate of increase in the plants has now reached 6,000 a month.

PROPAGATION.—The last published record of the number of plants is that dated 15th June 1863. The total number of plants on that date was 6,530. The number on the 15th July was 19,516. As *Cinchona Pahudiana* was not increased

at all during this period, it must be excluded from the Table while calculating the rate of increase during the past year, which is then 400 per cent. It is, however, deserving of notice as showing the great suitability of the climate of Darjeeling for the species *Cinchona Officinalis* (var. *Chakwarguera*) that the rate of increase of that species has been nearly 2,000 per cent. during the same period. The rate of increase is now most satisfactory, and the cuttings obtained monthly are large and healthy. Cuttings root in from fifteen days to three weeks, depending on the amount of sunshine. They root more quickly in sunshine than they can do in rainy weather. As I have already stated, the entire absence of artificial heat and of suitable conservatories prevented me attempting any propagation during the winter months—December, January, and February. A small increase was obtained in March, and since then the propagation has steadily increased every month. It is now about 6,000 a month.

In the first Table below I have given the results of the various reports of the numbers of plants on certain dates.

The second Table contains a Statement of the number of plants with which the experiment was commenced in 1862; also of the number of plants received in April 1863 from Ootacamund and Ceylon. The sum of these columns compared with the numbers of June 1863 and 15th July 1864 will show the satisfactory progress that has been made.

Table showing the increase of *Cinchona* Plants at Darjeeling from 15th June 1863 to 15th July 1864.

Names of Species.	15th June 1863.	23rd August 1863.	1st November 1863.	1st April 1864.	15th July 1864.	REMARKS.
<i>Cinchona Succirubra</i> ...	1,024	1,925	2,937	3,053	4,904	Not increased since 15th June 1863.
" <i>Calisaya</i> ...	53	176	172	172	172	
" <i>Officinalis</i> ...	573	1,261	1,899	2,930	10,460	
" <i>Micrantha</i> ...	695	953	1,078	1,144	1,705	
" <i>Pahudiana</i> ...	2,275	2,275	2,275	2,275	2,275	
Total ...	4,620	6,530	8,351	9,574	19,516	

Table showing the number of *Cinchona* Plants received at Darjeeling in 1862 and 1863, and the annual increase from them.

Names of Species.	Return of 1st June 1862.	Received from Ceylon and Ootacamund, 1st April 1863.	Return of 15th June 1863.	Return of 15th July 1864.	REMARKS.
<i>Cinchona Succirubra</i> ...	74	97	1,024	4,904	Eleven of these were received from Ceylon in January 1863
" <i>Calisaya</i> ...	5	21	53	172	
" <i>Officinalis</i> ...	None.	105	573	10,460	
" <i>Micrantha</i> ...	79	115	695	1,705	
" <i>Pahudiana</i> ...	53	None.	2,275	2,275	
Total ...	211	338	4,620	19,516	

SITE OF PERMANENT NURSERY AND ROAD TO IT.—

In the first Report of the introduction of Cinchona cultivation at Darjeeling I mentioned that the only Government land I could obtain was situated ten miles from Darjeeling; that to reach it a road had to be made through a private estate, and running through a dense forest of oak, chestnut, laurels, cherries, and maples. This road was commenced in June 1862. It starts from the Ganges and Darjeeling Cart Road at the point where that road crosses the Saddle below Sinchal, about three miles from Darjeeling. The road is not completed yet to its proper width of eight feet; in several places it is not more than two-and-a-half to three feet wide, but it was passable for ponies by the middle of October 1863. Estimates have been called for for widening the road to ten feet, and in the meantime the Executive Engineer has been requested to have it completed to the estimated width of eight feet with as little delay as possible. Its length from the point where it leaves the cart road is stated to be seven miles and three quarters, thus making the distance to the end of the road about eleven miles from Darjeeling.

The road terminates at a point about 6,000 feet above the sea in a forest consisting principally of *Michelia Cathcartii* and *lanuginosa*, *Bucklandia populifolia*, *Cyclodaphne*, *Alseodaphne*, *Prunus*, *Plectocomia*, and tree ferns, of which one specimen is fifty feet in height. The difficulty of erecting permanent nursery buildings at this distance from Darjeeling appeared to me to be so great, especially after my experience of the difficulties of having any work rapidly finished even in the Station of Darjeeling, that I endeavored to procure a site for these buildings from Mr. Charles Barnes, whose large estates are contiguous to the Government land reserved for Cinchona plantations. That gentleman liberally asked me to choose any site I pleased to the extent of ten acres, and I fixed on a suitable one in his estate near the tract where the open air plantations will be formed. This site of ten acres of level ground was made over to Government in perpetuity without any charge whatever, and under only one condition that, should Government ever retire from the cultivation of Cinchona, and should wish to sell the buildings on the site given by Mr. Barnes, he or his heirs should have the option of buying the buildings at their cost price without any charge for the land in which they stand. I was permitted to accept the site on these terms. With the assistance of the Executive Engineer the sites for the European Gardeners' dwelling-houses, the out-offices, and for the propagating house were marked on the 13th November last. In the end of February I visited the site and found that all the places were being levelled for the buildings; that the preparation of the wood-work of one house was advancing slowly; and that a large number of bricks were being dried in the sun preparatory to burning them.

In the end of May little progress had been made in the buildings; the foundation walls of one house had been laid, about a lakh of bricks had been burnt, but the sites of other buildings had not even been levelled, and those for the out-houses had not been commenced. It seems probable now that all the buildings will be complet-

ed by the end of April 1865, by the time the second year's lease of the present nursery will expire.

PLANTATIONS.—In the middle of June 1864 I selected a suitable spot on the Government reserved land as the commencement of the open air cultivation of Cinchona. This place is 3,743 feet above the sea as determined by the barometer, and is situated on the south-eastern slopes of a long spur from Sinchal. It is known to the Lepchas as Rungbee, and I have adopted this name for the plantation. The elevation of the lowest part of the spur is about 1,300 feet above the sea. The area of the land on it suitable for Cinchona cultivation is about 1,500 acres, from which a considerable deduction must be made for cliffs and rocky ground. Below 4,000 feet the land is partially cleared for the Native cultivation of maize, millet, and eleusine. In the forest within the range adopted for Cinchona cultivation are found *Talauma Hodgsoni*, *Gordonia Wallichii*, three species of *Saurauja Actinidia*, several *Cucurbitaceæ*, several species of *Begonia*, *Sapindaceæ*, numerous *Labiata*, and at the lower altitudes, *Albizia* and *Bauhinia*, with *Cleodendron* and *Callicurpa*, several *Acanthaceæ*, a lofty *Artocarpus*, and several species of *Ficus*. A large pellate-leaved *Rottlera* is found everywhere on the spur up to 5,000 feet. *Endogeneæ* are abundant, though not numerous in species, and of them *Musa* forms the most marked feature of the vegetation of the spur up to 5,500 feet. The trees are clothed with *Pothos*. Orchids and epiphytic species of *Zingiberaceæ* (proving the extreme moisture and equability of the climate). Four species of bamboo occur at different altitudes, one of them scandent and resembling in habit the *Chusquea* Kunth of the Andes.

Palms occur of the genera *Plectomia*, *Calamus*, *Areca*, *Cargota*. Ferns of the most tropical genera are abundant, and tree ferns are common from the base of the spur to 6,000 feet. The temperature of the air at the plantation formed at 3,743 feet has been frequently recorded since the end of June; the maximum temperature observed is 75° and the minimum 64°.

After having fixed on the site for a plantation a road had to be made to it through the dense jungle. From the point in the forest where the road made by the Public Works Department ends, a path has been made five miles in length; the first part through tangled and prickly masses of *Plectocomia*, and this was completed to the first plantation by the end of June, when the ground was also ready for the plants, having been cleared, trenched, and surface drained.

At the nursery at Lebong the Cinchonas intended for planting out were removed from their pots packed in baskets with cocoanut fibre, and carried by coolies to the forest. Tents had been pitched there for the European Gardeners, Mr. Mann and Mr. Jaffrey, who were engaged in planting out the Cinchonas during the three following days. The plants, varying from one foot to two-and-a-half feet in height, were placed five feet apart, each species by itself, and were left perfectly unprotected from the weather. A light fence was placed round the plantation to keep off cattle and wild animals.

The number of Cinchonas placed in the plantation was;

Cinchona Succirubra	...	100
" Officinalis	...	100
" Micrantha	...	50
" Calisaya	...	2
" Pahudiana	...	271
Total	...	523

From this experimental plantation at 3,743 feet important results will, I hope, be obtained, as the comparative growth of plants of the different species alongside of each other and under the same condition will enable me to form an opinion of the altitudes best adapted to each. From this point the plantations to be formed next year (thirty or forty acres for all species exclusive of *Cinchona Pahudiana*) will radiate in all directions according to what are found to be the requirements of the plants. The plants were not in the most satisfactory state for experimenting on, as from their rapid growth and large size no further time could be lost either in planting them or making cuttings from them. They were therefore taken direct from the warm equable air of the green house, and they will have greater difficulties to contend with than if they had been inured by degrees to the open air and all kinds of weather. All plants grown in the conservatories will, in future, go through the process called by gardeners "hardening off" before they are planted in the open ground. Sheds have been erected at the plantation at three different heights—at 3,743, 2,500, and 1,760 feet above the sea. In these I have placed a considerable number of all the species (in the lowest *C. Succirubra* alone) which, having yielded a great many crops of cuttings, have become exhausted. By exposure to the open air they will after a while yield more vigorous cuttings than they have done lately, and afford at the same time some data concerning the comparative rate of growth of the species at different altitudes.

SEEDS.—In April last I received 200 seeds of *Cinchona Calisaya* from Dr. Juunghuhun.* The seeds were produced in Java by one of the trees brought by Dr. Juunghuhun from the Botanic Garden, Leyden, where it has been raised from seed sent from Bolivia by Dr. Weddell, the French Botanist. Only nine of these seeds of this valuable species have germinated, but the young plants obtained are healthy and have already three pairs of leaves. In the same month I received a quantity of seed of *Cinchona Petayensis* from

* I have just received intelligence of the death of Dr. Juunghuhun, who had charge for so many years of the Cinchona cultivation in Java.

Mr. Markham. The seeds were sent to Mr. Markham from South America by Dr. Jameson of Quito.

They were sown at Darjeeling in the first week of May in a slightly warm frame, but up to the 15th of July not one of them have germinated.

ESTABLISHMENT.—I am indebted to Sir W. Hooker for having nominated Mr. Gustav Mann for employment in the cultivation of Cinchona at Darjeeling. Mr. Mann had just returned from the West Coast of Africa, where he greatly distinguished himself in the capacity of Government Botanist under the orders of the Admiralty. Mr. Mann arrived in India on the 14th March last, and he has been appointed Head Gardener in charge of the Cinchona cultivation at Darjeeling.

Mr. Jaffrey is attached to the cultivation as Assistant Gardener. Mr. Ryan as Overseer has proved most useful in taking a general superintendence of the coolies; though not a trained gardener he has acquired several of the minor operations of gardening. It has been impossible to procure any class of Natives except the lowest coolies. No sooner are these people taught to do the most ordinary work of the nursery without constant European superintendence than they, either tired of the nature of the work or from some other cause, and almost usually without any notice, abscond with wages due to them. The annoyance and unnecessary waste of time in teaching fresh gangs of coolies, only to be deserted by them in a month or two, have become so serious an evil that I shall immediately on my return to Calcutta endeavor to procure a party of dhangur coolies on an engagement to remain in Darjeeling at least for two years. To secure such men a larger rate of wages must be given than I have estimated for.

Since last year the cultivation of Cinchona has been successfully commenced by two private individuals near Darjeeling, the plants having been obtained partly from Ootacamund and Ceylon. In one case the cultivation is carried on a scale which it is evidently intended to extend with the increase of the plants. A European Gardener conducts the operation, and the plants in the nursery already exceed 1,000. The other experiment is on a smaller scale and has been entirely conducted in the open air at an elevation of about 3,000 feet and with only one species, *C. Succirubra*, but also with success. I have had applications from other proprietors of Tea Estates for assistance and advice in commencing similar experiments here, and in all cases I have rendered every assistance in my power.

T. ANDERSON, M. D.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, SEPTEMBER 14, 1864.

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On the working of the Rent-law, especially in relation to the cultivation of Indigo in the Districts of Nuddea and Jessore.

Extract from the Annual General Report of the Commissioner of the Nuddea Division for the year 1863.

NUDDEA.—*Para. 20.*—Every phase of the Rent and Indigo questions has been presented to the Government as it took place. The District was long in suspense for a final judicial determination of the principle on which rents were liable to enhancement. This has now been given, and the decision of the question has at least given the zemindar and tenant a fixed basis on which to treat. I have seen the lands of Issur Ghose, which were the subject of the well known decision, and I do not believe that one Rupee a beegah is more than can be paid for such lands without depriving the tenant of a fair return. The suddenness of the rise is its worst feature; the profits of cultivation have increased gradually, and with them the tenant's position in life has improved; he has in Nuddea paid his 5 annas a beegah as rent, and has been in the habit of enjoying the rest of the profits himself. The effect of the present movement is at once to transfer 10 annas out of the profits of every beegah from himself to the landlord. However well he can afford this, and however right it may be that he should pay it, the tenant naturally feels the sudden diminution of his income to that extent to be a hardship; but I have little doubt that the enhancement will gradually be submitted to as a matter of course. It is to be observed that no decision of a Court of Justice will have practical effect as a ruling precedent in a neighbourhood if the rate adopted by it as fair and equitable be above the true market rate, for rather than pay more than the market rate the tenant will throw up his land, and whatever be the rates adopted by the Courts, it

will not be the interest of the landlord to attempt to enhance up to the point which will drive the tenant away. The increasing demand for labour on public works with the high pay offered for such labour provides a check which will prevent the landlords from demanding a rate of rent above that which will leave a fair margin of profit to the tenant.

21. I am informed that lately a Soonderbuns zemindar, who was passing through the Nuddea District, was beset with ryots making enquiries as to the terms on which new comers could settle in the cleared Soonderbuns.

22. The immediate effect of the decision of the High Court on the rent question in Nuddea has been to enable the planter zemindars to extend the cultivation of indigo:—Either a decree for the Rupee has been obtained against the tenant, or the tenant knows that it can be obtained whenever the planter landlord chooses. Rather than pay this rent the tenants enter into indigo contracts. Whether these contracts are in themselves profitable to the cultivators, or a certain source of loss, depends entirely on the terms on which the factory elects to make them. The cultivator, I believe, does not stop to calculate this; he does not look upon the indigo contract in a commercial point of view with reference to any profit it will bring him. Did he do so he would surely require that the advantages which he has to gain by the transaction should be secured to him as formally by recital in the deed of contract as his obligations to the factory are secured thereby. But the only advantage which the written agreement secures to him is the payment of a certain sum per beegah in advance, and adjustment of the account at the rate of a Rupee for two, four, or six bundles, as may be the price paid by the factory. It is not doubted that the main object of the ryot in entering into the contract is to avoid the enhancement of rent; but no allusion is made to this in the contracts I have seen.

They would be completely binding on the ryot for three, six, or ten years, as the case may be, even though the planter landlords were to insist on an enhancement of rent the day after the execution of them. The contracts are, I believe, entered into not with a view to profit but as a tribute which secures the good will of the planter landlord, and as the means of averting the calamity of enhancement of rent. The execution of indigo contracts under rent pressure is at the time an admission by the cultivators that they are at the mercy of their landlord, and that his good will must be secured. The complaints of contracts having been taken "forcibly" have been very numerous; in a few instances they have been judicially established, but I believe that physical force or bodily fear is rarely brought to bear, nor is it necessary; the force of circumstances and the treatment which a tenant who has "settled" receives from his landlord, as compared with that which the refractory tenant receives, are causes quite sufficient to bring the cultivators to a settlement sooner or later.

23. The contracts having been executed, the period between the selection of the lands for indigo by the factory and the time for sowing the rice has been critical. Notwithstanding the theory which has lately been set forth as to the rotation of crops, the practice is for the factory to select and mark off the lands which shall be sown in indigo. In some of the contracts I have seen the right to do so is specially conferred on the factory; other contracts contain no such stipulation. When the time comes the cultivators chafe much at this arbitrary selection by the factory, and herein is the principal danger of collision. Perhaps the cultivator repents having executed a contract containing so obnoxious a condition and repudiates it entirely. Or perhaps he ignores the "mark" placed by the factory on the selected lands and sows his rice, which the factory ploughs up and sows indigo over it, or the cultivator ploughs up the growing indigo and

sows his rice on it. With the exception of the Bagadangah case, however, no serious breach of the peace has occurred during the year from this cause. The execution of decrees has led to more disturbances.

24. JESSORE.—In this District factories have lately been re-opened, things have been quiet, and generally the relation between the planter landlord and the cultivators has been better than in Nuddea.

25. I am informed that confusion has been created in some parts of the District by the action of the ganteedars, or superior tenants. It is said that they are generally in possession of more land than their tenures cover. Measurement would show them to be liable to enhancement. To avert the impending measurements they assign lands within their tenures to the factory for indigo. But as the land is already occupied by their *khajuma* or *kurfa* under-tenants, who have nothing to fear from a measurement, a conflict arises. One collision has just occurred in the Bongong jurisdiction: the factory servants went to sow indigo on land of which the ganteedar had given a lease to the factory; the tenant who occupied the land before remonstrated; the factory servants continued sowing; the ryots turned out are said to have assaulted the factory servants more or less, and then handed them over to the Police on a charge of criminal trespass. The former possession of the tenant is admitted, but the ganteedar asserts that the land is *Ootbundee*, as to which the tenant has no right and no liability for rent except as long as his crop is on the ground; on the other hand the ryot alleges that the land in question is part of his *jumma* from which he cannot be dispossessed by the ganteedar. The case is under investigation. Such a question as this will probably be raised in most of the cases in which the ganteedar has assigned to the factory lands which were last year in the possession of his under-tenants.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, SEPTEMBER 28, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

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Report on the Condition of the Royal Botanic Garden, Calcutta,

FROM 1ST APRIL 1863 TO 1ST APRIL 1864.

THE GARDEN.—The formation of groups of natural orders of plants was continued during the rains of last year. The number of orders was small compared with the extensive list given in the Report of last year; but the number of species planted out was larger than that of the previous years, as groups of a few very large orders abounding in tropical species were completed.

Groups of the following natural orders have been formed:—

Anonaceæ.	Melastomaceæ.
Malvaceæ.	Alangiaceæ.
Sterculiaceæ.	Myrtaceæ.
Ternstroemiaceæ.	Rhizophoraceæ.
Ampelidæ.	Lythraceæ.
Celastrineæ.	Onagraceæ.
Terebinthaceæ.	Araliaceæ.
Papilionaceæ (partly.)	Coniferaæ.
Combretaceæ.	

Large additions were made to nearly all the natural orders of which groups had been formed in the previous year. This consisted principally of the large collections of plants obtained from Java during my mission to that Island in 1861; also of plants raised from seed collected in Sikkim during my visits there in connection with the introduction of Cinchona. All the plants placed during last year in their sites in the natural arrangement had, by the end of February, labels attached to them in the manner described in my last Report. During the cold season about twelve acres of ground near the large Banyan tree, and which, ever since the formation of the Garden in the end of last century, had been covered with coarse grass, "*Khasya*" *Saccharum spontaneum*, was prepared for planting the remainder of the sub-order Papilionaceæ and of Cassalpinia and Mimosa. The process followed was the one

usually adopted by Indigo Planters in re-claiming jungle land. The ground had been ploughed in January 1863, and the grass roots collected and burnt. Jute, (*Corchorus Olitorius*), Dunchya, (*Aschynomene Cannabina*), Sun, (*Crotalaria juncea*), and *Ilbiscus Cannabinus*, all rank growing plants, were sown in distinct patches on the ground at the setting in of the rains. The result desired was the smothering of the weeds, and specially of the *Saccharum spontaneum*, by these rapid growing and dense crops. This was most effectually done by the Jute, and in a much less degree by all the others. Immediately on the removal of these crops in October, seeds of cold weather crops were sown. These were Peas, the degenerate form of *Pisum sativum*, called Muttur; Raie *Brassica Campestris*, Linn. After the reaping of these crops in March the ground was again ploughed, harrowed, and thoroughly weeded, and last of all rolled with heavy iron rollers. When the latter process is omitted I find it is impossible to mow the grass which springs up most luxuriantly in the rains.

NURSERIES.—Seeds of several interesting species of trees were obtained in considerable quantity during the year, and the plants raised from them were kept for distribution to Officers wishing to form avenues of trees in their Districts; also for planting along the roads of Canning at Muttah and to complete some avenues commenced last year in Calcutta, as well as for clumps of trees intended to be planted on the Maidan. All the Mahogany seeds obtained in March 1864 were at once sown for the continuation of the avenue of Mahogany trees along the Ganges and Darjeeling Road. One thousand five hundred seedlings of *Polyalthia longifolia* were also raised for the completion of the avenue formed along the east side of the Jail to the Cathedral.

(Garden Roads and Buildings.)

The quadrennial repairs of all the Buildings in the Garden were finished during last year. These repairs were last completed in the hot weather of 1859. The Buildings are now in good order, with

the exception of the Seed-house. The repairs of that Building are deferred for the present, as a plan has been submitted for the addition of a second story to the house, for the accommodation of the Herbarium.

A boundary wall with two strong gates, one of wood, and the other of cast iron, has been erected by the Public Works Department at the eastern extremity of the Garden. This wall is required to separate the Garden from a piece of land which I was directed to make over to the Magistrate of Howrah for a road to a new Ghât to be erected on the river bank. This road is the continuation of a projected new road, forming an entrance to the Garden from Howrah. A handsome iron foot-bridge has been erected across the nullah which flows through the Garden at right angles to the river. The roads leading to this bridge from the western portion of the Garden have been widened and repaired, and it is intended to carry out similar improvements on the eastern side of the bridge. The road which I mentioned in my last Report as having been commenced last year has been completed, so far as it was possible, without making a new embankment. During the ensuing cold season I hope to finish the raising of the ground for the remainder of this road.

Distribution of Plants and Seeds.

OF PLANTS.—Twenty wardian cases containing live plants were dispatched to the following Botanic Gardens and other places during the year:—

The Revd. Frederick Beadon.
Botanic Garden, Cape Town.
Ditto, Java.
Ditto, Sydney.
Ditto, Bourbon.
Public Garden, Singapore.
Ditto, Hong-Kong.
Captain Smith, Fyzabad.
Harrison, Esq., Singapore.
Hon'ble Colonel Cavenagh, Singapore.
Peninsular Oriental Company's Agent, Suez.
Darjeeling.
M. Armangue, Nantes.
The Revd. C. Parish, Moulmein.
Besides these, eighteen closed and open boxes were also given in exchange for other plants as contributions to Amateurs and Public Gardens.
Public Gardens, Mirzapore.
Ditto, Benares.
Colgong.
J. W. Brecks, Esq.
Botanic Gardens, Kew.
Darjeeling.

These make a total number of thirty-eight boxes containing 950 plants. This is an increase of six cases compared with the number sent away last year. In exchange for these I received thirteen cases from the following Botanic Gardens and correspondents:—

Botanic Garden, Peradenia.
Ditto, Java.
Ditto, Kew.
Ditto, Cape Town.
Ditto, Sydney.
Ditto, Nantes.
Political Agent, Aden.

In addition to these a few rare plants in pots were presented by residents near Calcutta in exchange for plants they had obtained from me.

These plants, received during the year, number 390. The plants distributed in flower pots in which they were grown were given principally to residents of Calcutta. During the year 4,382 plants were distributed in this manner. The corresponding number for the previous year being 1,570. In accordance with the order of the Lieutenant-Governor of Bengal the surplus stock of the Garden was offered for sale at rates as nearly as possible equivalent to those asked by Mallees for their plants. The sale was effected by the Head Gardener during a fixed hour every day.

Though the sale was advertised in the Newspapers, and a priced Catalogue of the plants offered for sale was printed and widely distributed, still the result was very discouraging. Among the plants offered for sale were several newly introduced species. The total number sold was 406 plants out of 1,155, and the sum realized was Rupees 200-14. As this is only the second time on which it has been attempted to sell the surplus stock, I think the sale may be repeated again this year and in the same manner as the sale of last year in hopes that, being more widely known, it may be more successful.

DISTRIBUTION OF SEEDS.—In my last Report I complained of the difficulty of superintending the important operations of collecting, cleaning, and distributing the seeds of the many rare and valuable plants of this Garden. I was enabled to bring this question fully before the Lieutenant-Governor in my Report on the proposal of the Agri-Horticultural Society that the gratuitous distribution of plants from this Garden should be resumed. In reporting unfavorably on this proposal I stated my conviction that the object contemplated by the Society might be met by placing the Seed Department of this Garden in an efficient condition. The plan as indistinctly sketched by me in my letter No. 68, dated the 5th December 1863, to the Secretary to the Government of Bengal, was sanctioned by the Lieutenant-Governor. The Seed Department, in its re-modelled state, and under the superintendence of Mr. Pierre, commenced distribution on the 1st April. The compilation of a Catalogue of all the seeds produced here was begun at the same time. After the first six months have passed, and simultaneously with the issue of the Seed Catalogue, I intend to report fully on the plan that should be finally adopted as the rule for the management of this Department.

During the past year, thirty-six packets of seeds were given gratuitously, or in exchange for seeds received. Seeds were sent to the following Botanic Gardens:—

Agri-Horticultural Society of Lucknow
Government Mysore Farm.
Botanic Garden, Java.
Ditto, Utrecht.
Ditto, Amsterdam.
Ditto, Leyden.
Ditto, Kew.
Ditto, Peradenia.
Ditto, Saharunpore.
Agri-Horticultural Society's Garden.
Public Garden, Hong-Kong.
Botanic Garden, Cape Town.
Agri-Horticultural Society, Umritsur.

The number of packets received was forty-two, being eight in excess of the former years. The usual supply of English and Native vegetable seeds

for the Soldiers' gardens of European Regiments was distributed during the year.

THE HERBARIUM.—The collections of dried plants received during the former year have nearly all been mounted on paper for the Herbarium. The specimens have been numbered, and the duplicates distributed to the Royal Herbarium, Kew; the Museum of the *Jardin des Plantes*; the Herbaria of the Botanic Gardens, Peradenia, (Ceylon,) Melbourne, Edinburgh, &c. The collections made by me at Singapore and in Java in 1861, Dr. Maingay's China and Japan collections, and the greater portion of my Sikhim collections of 1862 have been thus disposed of. The incorporation of the set of these collections which was retained for the Herbarium of this Garden, as well as of the large contributions received during the former year, is a slow process. Half of this work on these remains to be completed. Mr. Sulpiz Kurz, who was appointed Curator of the Herbarium, arrived from Java in January, and he has devoted himself with unexampled energy and perseverance to his duties. He brought with him from Java for presentation to this Herbarium an enormous collection of named specimens from the Malayan Archipelago. The number of species in this collection is probably not less than 6,000. When these are placed in the Herbarium they will make this, after the Herbarium of Leyden, the largest collection in the world of the plants of the Malayan Archipelago. Much inconvenience is caused to me as well as to the Curator and Assistant Curator by the want of a Building for the Herbarium. The nineteen cabinets containing the Herbarium (each holding about 3,000 specimens) are scattered all over the rooms of my private house with the exception of only four rooms. About four boxes containing 6,000 and 8,000 specimens of plants for the Herbarium are expected from the Royal Herbarium during 1864-65, and besides these 10,000 specimens of the large collections still to be incorporated in the Herbarium will be prepared within the same time by the Establishment attached to the Herbarium. To find room for the cabinets to contain these specimens I must encroach on the third story of my house, as all the ground and second story are now fully occupied (with the exception of one room) by the Library and Herbarium.

T. ANDERSON, M. D.,
Supdt., Botanic Gardens.

Agricultural Show of Live Stock and Produce
to be held at Mozufferpore, in Tirhoot,
on the 12th January and
following days.

GOVERNMENT has contributed Rs. 3,000 towards the expenses, and more than treble that sum will be raised by public subscription.

The hearty co-operation of all the principal Landholders and gentry in the Division, Native and European, is respectfully invited, and this can best be afforded by searching out and exhibiting the most superior specimens of the Live Stock and Produce of their respective Estates, by contributing towards the Prizes and general expenses of

the Exhibition, and by personally attending it with as many of their tenants and dependants as they can conveniently assemble.

There will be 2 sets of Prizes.

- 1st.—The Divisional Prizes, and
2nd.—The Local or District Prizes.

The Prizes now notified may, in several instances, be increased hereafter both in number and value, due notice of which will be given, but there will be no decrease.

The present Notification includes District Prizes for Patna, Tirhoot, and Shahabad; those for Sarun, Chumparun, and Behar will be published in a few days.

Prize Lists in English or Oordoo may be obtained shortly from any of the Collectors of the Patna Division, who will also furnish any further information required.

The following general Rules will be observed:—

1. The Show will be held from the 12th to 16th January at a suitable spot to be pointed out by the Collector of Tirhoot, and on the last day there will be a public distribution of the Prizes.
2. Exhibitors must submit a list of Live Stock and Produce intended for show not later than the 15th December, either to the Collectors of the District in which they reside, or if non-residents of the Division, to the Secretary to the Divisional Committee at Patna.
3. Intending Exhibitors can have their Live Stock aged at the time of submitting their lists as above, and the ageing then determined shall be received by the Judges as correct. A certificate will be given in each case, and the production of it before the Judges will be necessary.
4. No articles of Produce of the Division will be received excepting through the District Committees who will pass and classify them.
5. All Live Stock and samples of Produce must be in the Show Yard on the 9th January at latest, and none will be received after 4 P. M. of that day, nor will removal be allowed until the conclusion of the Show.
6. Each Exhibitor must forward with the Servant in charge of the Stock a clear and distinct label stating—
 1. Exhibitor's name.
 2. Residence.
 3. Class of Stock to be exhibited.
 4. Age of ditto.
 5. Where bred.
 6. Prize for which it is to compete.

7. Similarly all Produce must be clearly labeled with name of Exhibitor and residence, article, where produced, and quantity of which it is a sample.

8. All Live Stock and Produce intended for sale should have the prices attached to them.

9. Provision will be made, so far as practicable, for the safe custody of Live Stock and Produce, but Exhibitors are required to send persons to remain in charge, as also to feed the Live Stock.

10. Arrangements will be made to enable Exhibitors and their Servants to purchase, at a rate fixed by the Collector, forage, provisions, fire-wood, &c., close to the Show Yard.

11. It is to be understood that Prizes not stated to be for any particular District or the Division of Patna are open to all comers.

12. In the absence of competition between two or more parties, the highest prize only will be awarded to the single exhibitor.

13. Prizes may be withheld at the option of the Judges if the Live Stock or Produce exhibited does not possess sufficient merit.

14. Arrangements will be made for the conversion of money Prizes of Rupees 20 and upwards into Medals, Cups, or other articles of Silver and bearing suitable inscription at the option of the Prize-holders.

15. On the first and last days Exhibitors and Subscribers only will be admitted free, others on payment of 1 Rupee each. On the three remaining days admission will be free to all.

G. F. COCKBURN,
Commissioner of Patna,
and President of Divisional Committee.
PATNA,
The 15th September 1864. }

The following gentlemen have been appointed Members of the Divisional Committee, and the names of others will be notified hereafter:—

G. F. COCKBURN, Esq., COMM., *President.*

T. C. TROTTER, Esq.
T. E. RAVENSHAW, Esq.
J. SUTHERLAND, Esq., M. D. } Patna.

A. J. ELLIOT, Esq.
MOULVEE IMDADALLY } Tirhoot.

J. P. WARD, Esq.
R. F. HUTCHINSON, Esq., M. D.
CHOWDRI LEAKUT HOSSEIN } Shahabad.

J. J. GREY, Esq.
J. JACKSON, Esq., M. D.
BABOO HERA LALL } Sarun.

A. HOPE, Esq.
R. BANBURY, Esq.
MOULVEE HOSSEIN BUKSH } Behar.

F. M. HALLIDAY, Esq. ... Chumparun.

Divisional Prize List.

LIVE STOCK.		1st Prize.	2nd Prize.	3rd Prize.	Total.
DEPARTMENT I.					
<i>Live Stock.</i>					
CLASS I.					
<i>Cattle.</i>					
1. *For the best Bull, country-bred, over 3 and under 5 years of age ...	...	50	30	20	100
2. For the best Bull bred any where ...	...	50	30	...	80
3. *For the best milch Cow, in Calf, or with Calf at foot, country-bred, under 7 years of age ...	...	50	30	...	80
4. *For the best milch Cow in Calf, or with Calf at foot, bred any where ...	...	50	30	...	80
5. *For the best pair of draught Bullocks ...	...	50	30	...	80
6. *For the best pair of plough Bullocks ...	...	30	20	...	50
7. For the best pair of Gynee Cattle of any kind ...	...	30	20	...	50
8. *For the best Buffalo Bull ...	...	30	20	...	50
9. *For the best Buffalo Cow with Calf at foot ...	...	30	20	...	50
Total ...	...	370	230	20	620
CLASS II.					
<i>Horses and Ponies.</i>					
10. *For the best Stallion kept expressly for breeding purposes not being Arab ...	...	80	50	...	130
11. *For the best Arab Stallion kept expressly for breeding purposes not being Arab ...	...	80	50	...	130
12. *For the best brood Mare with Foal at foot or in Foal kept for breeding purposes ...	...	70	30	...	100
13. *For the best Colt not over 2 years old ...	...	50	25	...	75
14. *For the best Colt over 2 years ...	...	50	35	...	85
15. *For the best Filly not over 2 years old ...	...	50	25	...	75
16. *For the best Filly over 2 years ...	...	50	25	...	75
17. *For the best pony or galloway over 12½ and not above 14 hands ...	...	20	15	...	35
18. *For the best Stallion Pony ...	...	20	15	...	35
19. *For the best Ekka Pony ...	...	20	15	...	35
20. *For the best Stallion Ass ...	...	10	6	8	19
Total ...	...	500	291	8	794

LIVE STOCK.				1st Prize.	2nd Prize.	3rd Prize.	Total.
CLASS III.				Rs.	Rs.	Rs.	Rs.
<i>Sheep and Goats.</i>							
21.	*For the best White Ram of any Indian breed other than fighting Ram	...	...	30	20	10	60
22.	For the best White Ram of foreign or mixed breed	...	...	30	20	10	60
23.	*For the best White Ewe of Indian breed	...	...	30	20	10	60
24.	For the best pair of White Ewes of foreign or mixed breed	...	...	30	20	10	60
25.	*For the best White Ewes of any Indian breed, to be exhibited in pens of 4, full mouthed	...	...	30	20	...	50
26.	*For the best White Ewes of any Indian breed, to be exhibited in pens of 4, from 4 to 6 teeth	...	...	30	20	...	50
27.	*For the best White Ewes of any Indian breed, to be exhibited in pens of 4, from 2 to 4 teeth	...	...	30	20	...	50
28.	*For the best White Wethers of any Indian breed full mouthed	...	...	20	16	...	36
29.	*For the best White Wethers from 4 to 6 teeth	...	...	20	16	...	36
30.	*For the best White Wethers from 2 to 4 teeth	...	...	20	16	...	36
31.	*For the best White Lambs	...	...	20	16	...	36
				290	204	40	534
<i>Goats.</i>							
32.	*For the best Buck Goat	...	...	16	10	5	31
33.	*For the best Milch Goat, long haired	...	...	16	10	5	31
34.	*For the best Milch Goat, short haired	...	...	16	10	5	31
				48	30	15	93
Grand Total				338	234	55	627
CLASS IV.							
<i>Poultry—Fowls.</i>							
All to be owned by residents of the Patna Division.							
35.	For best pen of Fowls, 1 Cock and 3 Hens, country-bred	...	...	10	5	...	15
36.	For best ditto ditto, Chittagong breed	...	...	10	5	...	15
37.	For best ditto ditto, imported Fowls	...	...	10	5	...	15
38.	For best ditto ditto, Game Fowls	...	...	10	5	...	15
39.	For best single Cock of any breed	...	...	5	...	...	5
40.	For best single Hen ditto	...	...	5	...	...	5
41.	For best pen of 4 Capons	...	...	10	5	...	15
42.	For best pen of Bantams, 1 Cock and 3 Hens	...	...	10	5	...	15
				70	30	...	100
<i>Guinea Fowls.</i>							
43.	For best pen, 1 Cock and 3 Hens	...	...	10	5	...	15
<i>Turkeys.</i>							
44.	For best Cock	...	...	5	...	...	5
45.	For best Hen	...	...	5	...	...	5
46.	For best pen, 1 Cock and 2 Hens	...	...	10	5	...	15
<i>Geese.</i>							
47.	For best Goose	...	...	4	...	...	4
48.	For best Gander	...	...	4	...	...	4
49.	For best pen, 1 Gander and 2 Geese	...	...	10	5	...	15
				118	45	...	163
<i>Ducks.</i>							
50.	For best Drake	...	...	3	...	...	3
51.	For best Duck	...	...	3	...	...	3
52.	For best pen of 1 Drake and 2 Ducks	...	...	8	3	...	11
				14	3	...	17

* These must be owned by a resident of the Patna Division.